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Presidential elections and secretary appointment: an event study for us biotechnology and drugs

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ABSTRACT

The aim of this study is to analyse the effect of the 2024 US presidential election and the appointment of the US health secretary to the largest US listed biotechnology and drug firms. Using an event study methodology, we find that President Donald Trump's election had no significant impact on the industry. On the contrary, the results show statistically significant negative stock price reactions around the US health secretary appointment. The negative industry reaction to the US health secretary appointment is largely explained by his scepticism about vaccination and criticism about the high prices of drug prescriptions and margins in the industry. These results highlight the importance of top government position appointments, especially when such appointments eliminate much of the uncertainty regarding future government action in the industry and political uncertainty hypothesis. Finally, cross-section analysis reveals that the firms most penalized by the 2024 US presidential election and the appointment of the US health secretary are those with the highest investments in R&D and capital expenditures. This could mean lower future investments in new vaccines or drugs, seriously harming society.

1. Introduction

Donald Trump is the first US president recorded as having anti-vaccination views. Hornsey et al. (2020) show that given his enormous reach and influence, his attitudes can change group members' opinions about vaccination. As a consequence, the childhood vaccination rate continued to decrease as Trump campaigned for a second term.[1] The vaccine misinformation and partisanship of public opinion contribute to this trend (e.g., Hornsey *et al.*, 2020).

Most recently (November 14, 2024), Donald Trump publicised that he intends to nominate Robert F. Kennedy (RFK) Jr., a vaccine sceptic, for the position of the head of the US Department of Health and Human Services. RFK Jr. has a history of expressing views that contradict scientific evidence, particularly regarding vaccines, which has led to his appointment being contested by public health

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[1] https://www.kff.org/policy-watch/childhood-vaccination-rates-continue-to-decline-as-trump-heads-for-a-second-term/.

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experts. Furthermore, he advocates scrutinizing the use of food additives and curbing the power of large pharmaceuticals.[2]

In this study, we investigate the short-term effects caused by Donald Trump's triumph in the 2024 US presidential election and the appointment of RFK Jr. as US health secretary on the largest US listed biotechnology and drug firms. The presidential election may not be fully understood, as Ahmed *et al.* (2025) explain that Trump's victory creates mixed sentiments in financial markets. On one hand, investors are optimistic about pro-business policies, stimulus measures, and deregulation, which could boost stock prices. On the other hand, concerns about trade policies, geopolitical risks, and Trump's "America First" approach may lead to trade disruptions and policy uncertainty, contributing to negative investor sentiment and falling stock prices. However, we expect a negative reaction from that industry to Trump's victory and RFK Jr.'s appointment, particularly due to scepticism about vaccination and criticism about the high prices of drug prescriptions (e.g., Levitt, 2024).

Our study contributes to the existing financial literature in multiple ways. Firstly, it extends the literature on the impact of the stock market on US presidential elections. Most previous empirical studies perform a multisectoral analysis of the impacts (e.g., Ahmed *et al.*, 2025; Cosma et al., 2025; Pham *et al.*, 2018; Selmi and Bouoiyour, 2020; Wagner *et al.*, 2018). Second, we examine how political events like elections create uncertainty that impacts firms' decisions, leading to slower economic growth and lower stock returns, and, moreover, policy uncertainty influences stock returns by affecting investor sentiment (Guisoet al., 2018; Nartea et al., 2020). Third, we study how firms may benefit from the new elected president through two main channels: firms may have financially supported Trump's campaign for a return (Koch and Schereck, 2025); or firms might benefit from his expected policies aligning closely with their interests (Ferriani et al., 2025). Our study focuses on the latter channel. Fourth, despite empirical studies on the effects of election results and healthcare reforms on share prices of healthcare sector (e.g., Al-Ississ and Miller, 2013; Blau *et al.*, 2019; Ellison and Mullin, 2001), to the best of our knowledge, this is the first study focused on the 2024 US presidential election and for a sample of largest US listed biotechnology and drugs firms. Prior studies (e.g., Blau et al., 2019; Pham et al., 2018; Selmi and Bouoiyour, 2020) show this industry is among those most likely to be negatively affected by presidential elections, mainly if the political strategy involves cutting healthcare costs and increasing regulation. Fifth, we also examine the stock market reaction to the appointment of the US health secretary, which has not been analysed in prior studies about the effect of elections on financial markets. Thus, according to Luechinger and Moser (2014), the effects of political appointments tend to be larger for top government positions and less anticipated announcements, and because it minimizes the policy uncertainty in the sector (Ferriani et al., 2025). Finally, our study investigates the cross-sectional determinants of firms' abnormal returns for these two events.

Using an event study methodology, this analysis focuses on the largest 125 US listed biotechnology and drug firms, and we only find a statistically significant negative stock price reaction on the appointment date of the US health secretary. Donald Trump's victory had no statistically significant effect on the industry. This finding highlights the importance of political appointments after the presidential elections, especially when such appointments eliminate much of the uncertainty regarding future government action in this sector. These results seem to be in line with the conclusions of Ferriani et al. (2025), since the companies in this sector exhibit lower sentiment values on Trump's victory, which reflects their lower chance to benefit from his political agenda. They also find that the increase in the economic policy uncertainty after the election day reflects concerns about the formation of the new government cabinet and uncertainty surrounding some Trump's policies, which may have greater implications in the medium to long term. Considering our results for the secretary appointment, the significant uncertainties regarding the implementation of Trump's agenda seem to have been cleared up with the appointment of RFK, with the market penalizing the shares of companies in this sector due to the anticipation of policies contrary to their interests. Finally, this study reveals the firm-specific characteristics that serve as value drivers for biotechnology and drug firms during the 2024 US presidential elections.

2. Elections, political uncertainty, and investor sentiment

Numerous studies found that politicians can influence economic outcomes, influence asset prices, and modify financial risk. While some studies examine how elections affect economic outcomes (e.g., Bloomberg and Hess, 2003), others analyse the link between elections and the stock market (e.g., Ahmed *et al.*, 2025; Belo *et al.*, 2013; Santa-Clara and Valkanov, 2003; Wagner *et al.*, 2018), and the link between political risk and financial risk (e.g., Erb *et al.*, 1996).

Some studies show that political uncertainty increases during national elections (e.g., Bialkowski *et al.*, 2008; Boutchkova *et al.*, 2012; Goodell and Vähämaa, 2013). Bialkowski *et al.* (2008) find that market indexes are more volatile during elections, while Boutchkova *et al.* (2012) show that politically sensitive industries face less predictable cash flows. The last study displays that S&P 500 volatility rises with favourable shifts in a candidate's winning probability.

Pástor and Veronesi (2012; 2013) analyse the effect of political uncertainty on asset pricing, showing that changes in government policy negatively affect stock prices. The first work shows that the impact of the discount rate typically exceeds the cash flow effect, leading to declines in equity prices and increased stock volatility with a policy change notice. Pástor and Veronesi (2013) find that greater uncertainty in possible new government policies leads to higher risk premiums, greater volatility, and stronger correlations in stock market returns.

Some studies analyse the effect of reforms in the sector. Ellison and Mullin (2001) explore the impact of President Clinton's healthcare reform (1992–1993) on pharmaceutical stock prices and find a 52.3 % drop in market-adjusted prices. Al-Ississ and Miller (2013) examine Scott Brown's surprising election to the US Senate and find positive abnormal returns for healthcare firms. Finally,

[2] https://www.bbc.com/news/articles/c4gx3kkz8z3o.

Selmi and Bouoiyour (2020) examine US industries' reaction to the 2016 presidential election, finding that the healthcare industry was the most adversely affected, especially after Trump's decision to "ease the burden of Obamacare".

Previous research shows the effect of political uncertainty on corporate investment decisions. Based on national elections in 48 countries between 1980 and 2005, Julio and Yook (2012) find that high uncertainty during elections makes firms cautious about potential negative impacts on investment returns, leading them to delay investment until the situation stabilises. Gulen and Ion (2016) and Jens (2017) find that investment drops before elections due to uncertainty about future policies, mainly in firms reliant on government spending.

Policy uncertainty also affects stock returns by shaping investor sentiment (Guisoet al., 2018; Nartea et al., 2020). Increased uncertainty leads to higher perceived risks, influencing investors' outlooks. Baker and Wurgler (2006) state that investor sentiment reflects beliefs about future cash flows and investment risk amid uncertainty. Subjective market expectations may change with small shifts in information. Seok et al. (2024) show that investor sentiment positively affects stock market returns when uncertainty increases. Market uncertainty affects investor sentiment, leading to unpredictable behaviour and asset price fluctuations.

Some empirical studies analyse the impact of Trump's election on the stock market. Cosma et al. (2025) find that firms from sectors like energy, financials, and industrials had significant positive stock price reactions, and firms from materials, real estate, and consumer staples sectors had negative stock price reactions. Also, Martins et al. (2025, b) support that US banks' stock prices have a positive impact, explained by the belief of more favourable policies. Moreover, Cosma et al. (2025) show that firms performing better on environmental issues subsequently performed worse, as investors shifted their attention away from "green stocks". In the energy sector, Martins et al. (2025, a) find a negative stock price reaction for worldwide renewable listed firms, except in China. Regarding fossil fuel firms, only US firms show positive abnormal returns due to changes in US energy policy (pro-oil and gas policy).

3. Research hypotheses

In this study of the 2nd election of Donald Trump, we analyze the following two hypotheses:

[H1] The 2024 US Presidential election (November 5, 2024) is related to a significant negative short-term market reaction for US biotechnology and drugs listed firms.
[H2] The appointment of the US health secretary (November 14, 2024) is related to a significant negative short-term market reaction for US biotechnology and drugs listed firms.

According to the political uncertainty hypothesis, the stock market returns tend to decrease with a larger variability in new government policies (e.g., Pástor and Veronesi, 2012, 2103), and due to investment irreversibility in healthcare (e.g., Baker *et al.*, 2016; Gulen and Ion, 2016). Also, the investor sentiment hypothesis supports this expectation since investors seem not to be very confident that a new political agenda for this sector (Ferriani et al., 2025).

Moreover, regarding the appointment of RFK Jr. as US health secretary, Takakazu (2025) explains how his appointment surprised many health experts and points to Trump's strategy to reshape health policy through this nomination. In this sense, the appointment of RFK Jr. seems to increase negative sentiment towards the health sector. In a similar study, Castaño et al. (2025) analysed Lee Zeldin's appointment as head of the Environmental Protection Agency (EPA), an important decision because it directly reflects Trump's electoral promises about future climate actions in a specific person, which helps reduce uncertainty about energy policy. They find that all EU industries have negative returns from EPA nominations, while 5 to 8 US industries have positive returns, regardless of pollution levels.

4. Data and methodology

The data employed in the event study - the firm's stock returns and S&P 500 index (market index) - were collected from Eikon Refinitiv. The Eikon Refinitiv database features 301 US listed firms in the Biotechnology and Drug Manufacturers industries of Health Care Sector. In the selection of US listed firms, we choose the 125 US largest listed biotechnology and drug firms based on their market capitalization.

To assess how stock prices react to the 2024 US presidential elections and the appointment of the US health secretary, we apply the standard abnormal returns (AR) methods founded on the market model (MM) and the Fama and French (2015) five-factors (FF5). The market model ARs are calculated by estimating the residual returns from the following regression specification:

$$R_{i,t} = \alpha + \beta R_{m,t} + \varepsilon_{i,t} \tag{1}$$

where, R_{it} refers to the risk premium for firm i on the trading day t; R_{mt} refers to the observed market risk premium (market return minus the risk-free rate) on the trading day t; α_i and β_i refer to the regression coefficients of the daily rate of return of firm i and the market rate of return, respectively. e_{it} refers to the error term.

We computed the Fama and French (2015) five-factor abnormal returns (FF5) using the residual returns computed from the estimation of the following regression equation:

$$R_{i,t} - R_{f,t} = \alpha + \beta_1[R_{m,t} - R_{f,t} + \beta_2 SMB_t + \beta_3 HML_t + \beta_4 RMW_t \beta_5 CMA_t + \varepsilon_{i,t} \tag{2}$$

where, R_{ft} refers to the risk-free rate of return at time t; R_{mt} refers to the benchmark index; *SMB* refers to the small minus large market

capitalization risk factor; *HML* refers to the high book-to-value minus low-book-to-value risk factor; *RMW* refers to the difference between the returns of firms with robust (high) and weak (low) operating profitability; *CMA* refers to the difference between the returns of firms that invest conservatively and firms that invest aggressively. We obtained the risk-free rate return and the Fama-French factors SMB, HML, RMW, CMA from Kenneth French's homepage at Dartmouth College.[3]

We use the event dates of November 5, 2024, and November 14, 2024, to calculate the ARs, that are computed by the difference between the observed returns of firm i on day t (R_{it}) and the expected return produced by the market model $E(R_{it})$, as below:

$$AR_{it} = R_{it} - E(R_{it}) \tag{3}$$

The event date is nominated as day $t = 0$. Like Ahmed *et al.* (2025), we utilize a 250-day estimation period to calculate the ARs. According to the authors, to mitigate potential information leaks before the event, we ignore the 41 days before the event day from the examination. By accumulating the abnormal returns around a specific time interval, we compute the ARs using the following specification:

$$CAR[t_1, t_2] = \sum_{t_1}^{t_2} AR_t \tag{4}$$

We examine seven distinct time intervals for the CARs: [−1,1], [−1,5], [−1,10], [−5,5], [0,2], [0,5], and [0,10]. Finally, for each time interval, we calculate the cumulative average abnormal returns (CAARs) using the following specification:

$$CAAR[t_1, t_2] = 1 \Big/ N \sum_{t_1}^{t_2} CAR_{[t1,t2]} \tag{5}$$

where, N represents the sample size (which is in this case, $N = 125$).

Then, we apply Ordinary Least Squares (OLS) to estimate the impact of firm characteristics on the CARs around the two events, following the specified model:

$$CAR_i = \beta_0 + \beta_1 \ln(SIZE_i) + \beta_2 LEV_i + \beta_3\ LIQ_i + \ \beta_4 ROA_i + \beta_5 INST_i + \beta_6 CAPEX_i + \beta_7 R\&D + \varepsilon_i \tag{6}$$

where CAR_i refers to the cumulative abnormal returns for firm i around each of the two events for time windows [−1;1] and [−1;5]. Table 1 shows the control variables utilized in the OLS estimation analysis. Control variables applied in the cross-section estimation were obtained from Refinitiv Eikon. Table 2 shows descriptive statistics and correlation matrix.

We examine the relationship between the abnormal returns and firm-specific attributes highlighted in the literature. Firm size, profitability, leverage, and liquidity are standard control variables (e.g., Almeida *et al.*, 2004; Astakhov *et al.*, 2019; Hao *et al.*, 2011). Based on Boehmer and Kelley (2009) and La Porta *et al.* (2002), we also use a variable that measures institutional ownership in the cross-section analysis. Finally, based on the study of Mahlich and Yurtoglu (2019), we include two additional control variables - R&D investments and capital expenditures. The authors argue that pharmaceutical firms have a comparative advantage in investing in R&D compared to other manufacturing industries.

5. Results

5.1. Abnormal return

Table 3 (Event 1) illustrates the CAARs around the 2024 US presidential elections. The CAARs are not statistically significant around the election of Donald Trump, except for time windows [−1;10] and [0;10], which temporally clash with the appointment of the US health secretary. The abnormal returns are quite similar when comparing the market model and Fama and French's five-factor model. These results do not allow us to support the first research hypothesis, which states negative abnormal returns for firms in the industry as a result of Donald Trump's victory.

We find different results for the appointment of the US health secretary (see Table 3, Event 2). The CAARs are negative and statistically significant across all seven event windows. The abnormal returns are quite comparable to Fama and French's five-factor model and market model. For the case of the time window [−1;1], the abnormal returns are −7.698 % and −6.899 % for the market model and the five-factor model of Fama and French model, respectively. These results show the importance of announcing top government position appointments for the stock markets, in line with Luechinger and Moser's (2014) conclusions, especially when such appointments eliminate much of the uncertainty regarding future government action in this sector. Before the health secretary's announcement, investors were uncertain about whether policy would change and in what direction.

Donald Trump's choice of a health secretary (RFK Jr.) who is sceptical about vaccines and shares the recently elected US president's criticisms of the industry's high price of prescriptions and margins explains the high negative returns found around the announcement. According to the political uncertainty hypothesis, political shocks occur when investors learn about the political costs linked to the potential new policies. These surprises highlight the ongoing flow of capital news and prompt investors to rethink their views on the likelihood of future government policy decisions. Pástor and Veronesi (2012, 2013) demonstrate that, on average, stock prices drop

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

Table 1
Determinants of CARs: Definition of Variables This table displays the notation and definitions of explanatory variables in Eq. (6) on the firm's Cumulative Abnormal Returns (CARs).

Variable	Notation	Measure
Size	**SIZE**	Natural logarithm of market capitalization in USD
Leverage	**LEV**	Ratio of total liabilities to total assets (%)
Liquidity	**LIQ**	Ratio of current assets to total assets (%)
Profitability	**ROA**	Ratio of operating income to total average assets (%)
Institutional Ownership	**INST**	Percentage of a company's stock that is held by institutional investors (%)
Capital Expenditures	**CAPEX**	Ratio of capital expenditures to sales (%)
R&D	**R&D**	Ratio of research and development expenditures to sales (%)

Table 2
Descriptive Statistics for Control Variables and Matrix of Correlations This table shows the descriptive statistics and the matrix of correlations for control variables. All figures of firm-specific control variables are calculated from the 2023 year-end accounting figures. The variables are the following: $SIZE_i$ is the market capitalization in USD (natural logarithm) for firm *i;* LEV_i is the ratio of total liabilities to total assets (%) for firm *i;* LIQ_i is the ratio of current assets to total assets (%) for firm *i;* ROA_i is the ratio of operating income to total average assets (%) for firm *i;* $INST_i$ is the percentage of stock that are in possession of institutional investors (%) for firm *i;* $CAPEX_i$ is the ratio of capital expenditures to sales (%) for firm *i;* $R\&D_i$ is the ratio of research and development expenditures to sales (%) for firm *i.*

Variable	Mean	SD	25th perc.	Median	75th perc.
Descriptive Statistics for Control Variables - All Sample (#125 firms)					
SIZE	$23,311ml	$28,161ml	$1,724ml	$2,866ml	$6,505ml
LEV	25.83 %	39.04 %	8.95 %	18.29 %	38.52 %
LIQ	7.72 %	9.86 %	2.88 %	5.04 %	9.13 %
ROA	17.60 %	24.38 %	3.42 %	15.92 %	28.35 %
INST	41.11 %	21.77 %	22.78 %	36.78 %	54.13 %
CAPEX	7.51 %	8.92 %	4.74 %	7.45 %	11.21 %
R&D	22.30 %	24.56 %	10.77 %	21.75 %	31.65 %

Matrix of Correlations for Control Variables

	SIZE	LEV	LIQ	ROA	INST	CAPEX	R&D
SIZE	1						
LEV	0.028	1					
LIQ	0.140	−0.181	1				
ROA	0.252	−0.283	−0.060	1			
INST	0.153	−0.157	0.038	0.082	1		
CAPEX	0.263	−0.124	−0.054	0.305	0.324	1	
R&D	0.463	−0.031	0.503	−0.282	−0.109	0.463	1

when a change to the policy is announced. According to these authors, the negative stock price response will be greater in the case of policy changes that are detrimental to the sector and when markets are surprised. Lastly, given that the health sector is one of the most sensitive to policy changes (Baker *et al.*, 2016) and presents a high degree of investment irreversibility, this appointment and respective policy change tend to affect investment policy and respective future cash flows (e.g., Gulen and Ion, 2016; Julio and Yook, 2012).

5.2. Cross-Sectional analysis

We also analyse the cross-section effects of firm-specific characteristics on CARs around the 2024 US presidential elections and the appointment of the US health secretary. Table 4 displays the results of the regression estimation. Coefficients across variables are standardized. We show that the firms most penalized by the two events analysed are those with the highest investments in R&D and capital expenditures (*CAPEX*). Mahlich and Yurtoglu (2019) show that firms in this industry have higher returns on investments in capital expenditures and R&D than firms in several other manufacturing industries, suggesting that firms in this industry have some comparative advantage when it comes to investing in R&D. When a margin and profit cutting policy is put into practice, among the firms most penalized will be those that will see a reduction in the return on their investments. In practical terms, it could mean lower future investments in new vaccines or drugs.

Finally, the results also reveal that firms with higher leverage (in 2024 US presidential election columns) and higher size and profitability (in US health secretary appointment columns) are the most penalized in terms of CARs. Pástor and Varonesi (2012) show that firms respond to policy uncertainty by cutting investments. Lang et al. (1996), in turn, reveal the existence of a negative relation between leverage and future growth (investment). Thus, the foreseeable cut in investments tends to penalize firms with greater size and profitability, and justifying the lack of impact surrounding RFK's appointment.

Table 3

CAARs and Tests for the Significance of Abnormal Returns This table shows the Cumulative Average Abnormal Returns (CAARs) calculated using the market model (MM) (Panel 1) and the five-factor model of Fama and French (2015) (FF5) (Panel 2), as well as the results of abnormal returns significance tests. θ_1 and τ_1 are the p-value of *t*-test statistics and Corrado rank test statistics, respectively, based on Brown and Warner (1980) and Corrado (1989). ***, ** and * means statistical significance at the 1 %, 5 % and 10 % level, respectively.

Variable	Mean	SD	25th perc.	Median	75th perc.	θ_1	τ_1
Panel 1: MARKET MODEL (MM)							
Event 1: 2024 US Presidential Elections (November 5, 2024)							
CAAR [−1,1]	0.353 %	6.328 %	−2.685 %	0.640 %	3.074 %	0.843	0.886
CAAR [−1,5]	−0.528 %	10.857 %	−6.271 %	0.042 %	5.178 %	0.847	0.574
CAAR [−1,10]	−7.821 %	13.269 %	−15.345 %	−7.043 %	−1.209 %	0.028**	0.000***
CAAR [−5,5]	1.002 %	14.114 %	−8.188 %	0.536 %	9.964 %	0.769	0.609
CAAR [0,2]	0.137 %	6.206 %	−3.046 %	−0.534 %	3.612 %	0.822	0.755
CAAR [0,5]	−1.003 %	9.850 %	−5.721 %	−0.142 %	4.202 %	0.691	0.434
CAAR [0,10]	−8.296 %	12.691 %	−15.556 %	−8.091 %	−0.801 %	0.015**	0.000***
Event 2: Appointment of Robert Kennedy Jr. as US Health Secretary (November 14, 2024)							
CAAR [−1,1]	−7.698 %	6.601 %	−11.732 %	−7.632 %	−4.660 %	0.000***	0.000***
CAAR [−1,5]	−8.816 %	10.084 %	−14.610 %	−7.905 %	−3.212 %	0.001***	0.000***
CAAR [−1,10]	−7.939 %	16.242 %	−12.704 %	−6.643 %	0.495 %	0.020**	0.013**
CAAR [−5,5]	−9.976 %	12.898 %	−16.992 %	−8.831 %	−2.603 %	0.002***	0.000***
CAAR [0,2]	−7.345 %	6.817 %	−11.024 %	−6.855 %	−3.549 %	0.000***	0.000***
CAAR [0,5]	−7.421 %	9.275 %	−12.805 %	−6.558 %	−2.259 %	0.002***	0.000***
CAAR [0,10]	−6.544 %	15.561 %	−10.342 %	−5.172 %	2.031 %	0.044**	0.005***
Panel 2: FIVE-FACTOR MODEL OF FAMA AND FRENCH (2015) (FF5)							
Event 1: 2024 US Presidential Elections (November 5, 2024)							
CAAR [−1,1]	0.436 %	6.254 %	−2.333 %	0.556 %	3.099 %	1.101	1.089
CAAR [−1,5]	0.632 %	10.586 %	−6.155 %	1.322 %	6.239 %	0.902	0.874
CAAR [−1,10]	−7.702 %	12.450 %	−15.368 %	−7.767 %	0.259 %	0.024**	0.009***
CAAR [−5,5]	1.072 %	12.781 %	−8.469 %	0.588 %	7.624 %	0.811	0.789
CAAR [0,2]	0.178 %	5.991 %	−1.706 %	1.948 %	4.604 %	0.987	0.933
CAAR [0,5]	−0.437 %	9.549 %	−5.671 %	−0.321 %	4.831 %	0.354	0.377
CAAR [0,10]	−8.771 %	11.882 %	−16.408 %	−8.140 %	−2.319 %	0.014**	0.003***
Event 2: Appointment of Robert Kennedy Jr. as US Health Secretary (November 14, 2024)							
CAAR [−1,1]	−6.899 %	6.755 %	−11.386 %	−7.098 %	−3.299 %	0.005***	0.008***
CAAR [−1,5]	−7.800 %	9.722 %	−13.165 %	−6.297 %	−3.091 %	0.008***	0.008***
CAAR [−1,10]	−5.602 %	15.170 %	−9.547 %	−4.904 %	−0.046 %	0.033**	0.029**
CAAR [−5,5]	−11.447 %	12.045 %	−18.457 %	−9.896 %	−4.774 %	0.000***	0.000***
CAAR [0,2]	−6.447 %	6.785 %	−10.647 %	−5.893 %	−2.282 %	0.005***	0.007***
CAAR [0,5]	−6.090 %	8.984 %	−10.199 %	−5.490 %	−0.861 %	0.0010***	0.009***
CAAR [0,10]	−5.893 %	14.092 %	−7.533 %	−2.931 %	1.108 %	0.048**	0.013**

Table 4

Cross-Sectional Analysis This table offers the cross-sectional estimation for the 125 largest US listed biotechnology and drugs CARs' around the 2024 US presidential elections (November 5, 2024) and the appointment of US Health Secretary (November 14, 2024). The dependent variables are the firm's CARs for two different time windows: [−1;+1] and [−1;+5], computed using the five-factor model of Fama and French (2015) (FF5). The firm-specific and explanatory variables are computed from accounting data based in the prior year-end. These explanatory variables are defined in Table 1. Coefficients across variables are standardized. ***, ** and * mean statistical significance at the 1 %, 5 % and 10 % levels, respectively. Standard errors adjusted for heteroskedasticity are reported in parentheses. # Obs. denotes the number of observations used in the estimation.

	2024 US Presidential Elections		Appointment of US Health Secretary	
	CAR [−1;1]	CAR [−1;5]	CAR [−1;1]	CAR [−1;5]
Constant	−0.024	0.013	−0.035	−0.039
	(−1.009)	(0.675)	(−1.226)	(−1.123)
Ln(SIZE)	−0.007	−0.011	−0.0011*	−0.016*
	(−1.325)	(−1.511)	(−1.722)	(−1.878)
LEV	−0.013**	−0.012**	0.007	0.009
	(−2.121)	(−2.219)	(1.234)	(1.049)
LIQ	−0.005	0.008	−0.012	−0.019
	(−0.722)	(0.844)	(−1.579)	(−1.622)
ROA	−0.015	−0.017	−0.018*	−0.031**
	(−1.377)	(−1.422)	(−1.901)	(−2.097)
INST	−0.014	−0.020	−0.012	−0.011
	(−1.452)	(−1.567)	(−1.310)	(−1.016)
CAPEX	−0.017*	−0.020*	−0.036***	−0.041***
	(−1.855)	(−1.911)	(−2.711)	(−2.666)
R&D	−0.010*	−0.012*	−0.015**	−0.014**
	(−1.811)	(−1.955)	(−2.301)	(−2.223)
# Obs.	125	125	125	125
Adj. R^2	0.225	0.250	0.329	0.369

6. Conclusion

This research explores the short-term market effect of the 2024 US presidential election and the appointment of the US health secretary to the largest US listed biotechnology and drug firms. Employing an event study methodology, we find that the election of President Donald Trump had no statistically significant effect on the industry. On the contrary, the results show statistically significant negative stock price reactions around the US health secretary appointment. The negative industry reaction to RFK Jr.'s appointment is largely explained by scepticism about vaccination and criticism about the high prices of drug prescriptions and margins in sector. It seems to increase negative sentiment towards the health sector. These results highlight the importance of appointments for top government positions, mainly when such appointments eliminate much of the uncertainty regarding future government action in this sector and the political uncertainty hypothesis. Finally, cross-section analysis reveals that the firms most penalized by both events are those with the highest investments in R&D and capital expenditures. This could mean lower future investments in new vaccines or drugs.

Our findings have important practical implications. First, political uncertainty and politics appear to have a crucial role in firms' real investment decisions. Policy makers should recognize that the uncertainty around their decisions may be just as harmful as making the wrong decision. Then, our findings also suggest that when evaluating the probable effects of policy-related uncertainty on firms, we should consider that diverse firms will be impacted to different degrees. These effects depend on the level of investment irreversibility and the specific characteristics of each firm.

These results reveal that future studies on stock market reaction to presidential elections should extend their analyses to the appointment of top government positions, mainly when there is great uncertainty regarding the direction of government policy.

CRediT authorship contribution statement

António Miguel Martins: Writing – review & editing, Validation, Supervision, Conceptualization. **Bruno Albuquerque:** Software, Methodology, Investigation, Formal analysis. **Luís Sardinha:** Validation, Software, Methodology, Formal analysis, Data curation. **Nuno Moutinho:** Writing – original draft, Resources, Project administration, Investigation, Funding acquisition, Formal analysis.

Declarations of competing interest

None.

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Data availability

Data will be made available on request.

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