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Short-Term market impact of 2024 US President elections and Trump-Zelensky meeting in defence industry

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ABSTRACT

This study examines the short-term market effect of the US and European largest defence firms on the 2024 US presidential election (November 5, 2024) and the Trump-Zelensky meeting (February 28, 2025). By employing an event study methodology, our results show a positive and statistically significant stock price impact for both events. The results for the 2024 US presidential election are consistent with political business cycle theory. National elections in the arms-producing country drive a growth in sales revenues for defence firms, which tend to be higher when the Republican Party candidate wins the US elections. Our results also show the presence of heterogeneous abnormal returns between US and European defence firms around the Trump-Zelensky meeting, with European firms showing high and statistically significant positive returns while US firms show non-significant returns. This result is explained by the failure of security guarantees given by the US to the European countries and the awareness of the need for a rapid increase in military spending for self-defence purposes in Europe. This meeting reinforced the application of the principle of "Europe preference" in the acquisition of weapons. Finally, we conclude that stock market responses are reinforced or mitigated by firm-specific characteristics.

1. Introduction

The defence industry is crucial for the US by ensuring national security, boosting the economy, and providing a foundation for technological innovation. It supports the military's needs, enabling the US to project power and execute national strategy (e.g., Neuman, 2010). The industry also drives economic growth and employment, and its R&D efforts have led to numerous technological advancements.

Given the relevance of the defence industry to the US economy, it is essential to understand the impacts caused by the recent US presidential election on defence industry firms. Klomp (2023a) mentions that the literature about the impact of elections on military expenditure is quite inconclusive. On the one hand, country elections in the large arms-producing country boost defence firms' sales

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revenues, contributing to the improvement of the country's economic performance. This link, in many arms-producing countries, is reinforced by the close ties between politicians and defence industry firms (e.g., Luechinger and Moser, 2014). Purchasing from national defence firms is widely viewed as a legitimate and effective procedure of protectionism. This practice is often acceptable due to the significant economic and industrial benefits that arise from such procurement choices. However, it also fosters an environment where votes may be exchanged for political favours or economic advantages (Mayer, 1992, 1995). Then, on the other hand, the right fiscal policy around the presidential election may prioritize public spending categories that voters prefer, such as education, public infrastructure, healthcare, or social security (e.g., Bove et al., 2017).

This study contributes to the literature on the effects of presidential elections on the short-term returns of defence firms by examining the effects caused by the recent presidential elections in the US. Furthermore, since the re-election of President D. Trump, there has been a growing degradation of US security guarantees to its allies, which reached its climax in the recent meeting between Trump and Zelensky. After the meeting between Trump and Zelensky, several defence analysts reported that the US had abandoned its allies and discarded security guarantees to European countries (e.g., Braw, 2025). This uncertainty is a real issue, since modern weapons require regular software and technology updates to remain effective, and the buyers of these enormously expensive products must be certain that the selling country will remain cooperative and provide the necessary software and technology updates. As a result, European governments find themselves needing to support and protect the defence industry due to national interest (Heidenkamp et al., 2015). Consequently, The White Paper for European Defence (European Commission, 2025) and Draghi (2024) report propose the principle of "Europe preference" as vital to reducing dependence on the US and ensuring European self-sufficiency in arms supplies. This change in US defence policy towards its allies and the growing re-industrialisation of European defence certainly had consequences for the firm's stock price in the defence industry that deserve to be analysed.

We conduct an event study methodology and find a positive and statistically significant stock price effect for both events. The results for the 2024 US presidential election support the political business cycle theory and asset-pricing perspective/expected cash flow hypothesis. The 2024 US presidential election resulted in the re-election of D. Trump, the candidate of the Republican Party, who is traditionally in favour of increasing military spending, which contributes to greater cash flow for defence firms and, therefore, to the rise in those firm's stock price (e.g., Sabherwal et al., 2017). Our results also find the presence of heterogeneous abnormal returns between US and European defence firms around the Trump-Zelensky meeting, with European firms showing high and statistically significant positive returns, while US firms show non-significant returns. This result is explained by the failure of security guarantees given by the US to the European countries and the awareness of the need for a rapid increase in military spending for self-defence purposes in Europe. This meeting reinforced the application of the principle of "Europe preference" in the acquisition of weapons. Lastly, we conclude that stock market effects are influenced by firm-specific characteristics. We show higher abnormal returns for firms in the defence industry that have higher R&D, greater capital expenditure intensity, and sales to the government segment.

The rest of this paper is structured in five sections. The next section presents the literature review. Then, the following section offers the research hypotheses, data, and the event study methodology is explained. In Section 4, we present and discuss our main findings. Finally, this work ends with the conclusion section.

2. Literature Revision

2.1. Political cycle and defence industry

The seminal work of Nordhaus (1975) proposes the theory of the political business cycle (PBC), which argues that incumbents may manipulate public expenditures to improve their chances of re-election. This PBC theory is based on two main assumptions: (*i*) voters tend to focus on short-term perspectives and prioritise economic outcomes, and (*ii*) voters primarily consider their economic well-being when voting. Therefore, the manipulation of defence expenditures may possibly be a double-edged sword (e.g., Balestra and Caruso, 2025). On the one hand, in arms-producing countries, defence spending, as well as other public spending measures, can boost the economy in the short term by growing employment and revenues in that industry. In this regard, Klomp (2023a) refers that few countries have a domestic defence industry that significantly impacts their macroeconomics. According to SIPRI (2025), approximately eighty percent of arms market revenues are focused on seven countries – the US, UK, China, Russia, Germany, France, and Italy. Cusack and Don Ward (1981) and Griffin et al. (1982) examine the US military expenditures and conclude that internal political and economic factors significantly shape defence spending, rather than merely focusing on external threats.

On the other hand, especially in times of peace, incumbents and voters may list: (*i*) reducing public spending; (*ii*) increasing non-defence public expenditure to gain electoral support. These last scenarios can lead to a decline in defence spending. The reduction of public expenditures as a strategy to improve election predictions is evidenced by studies like Barro and De Rugy (2013), Bove et al. (2017) or Klomp (2023b). Barro and De Rugy (2013) demonstrate that the defence industry typically exhibits a smaller fiscal multiplier and consequently a lower impact on GDP compared to other industries, especially when financed through deficits. Bove et al. (2017) analyse the trade-off between military and social expenditures in 22 OECD countries, and they conclude that incumbents often decrease defence expenditures in election periods in order to increase social expenditures. According to the authors, voters prefer an expansion in other public spending categories, such as health care, education, social security, or public infrastructure. Nevertheless, this trade-off is often overlooked in countries facing conflicts, since national security concerns may restrict the ability to manipulate defence budgets for electoral purposes.

Considering that defence spending constitutes a component of public expenditure, some recent empirical studies have aimed to clarify how political elections affect variations in defence expenditures (e.g., Klomp, 2023a,b; Balestra and Caruso, 2025). Klomp (2023a) employs a database of 269 firms in 25 countries between 2002 and 2016 and show that: (*i*) total revenues of defence firms in

larger arms-producing countries rise as national elections draw near, possibly as a strategy to improve economic performance; (*ii*) elections in democratic foreign countries are linked to reduction of revenues in domestic defence firms; (*iii*) elections in autocratic foreign countries leads to a slight growth in defence sales for weapons manufacturers. Klomp (2023b) demonstrates that the election impact varies significantly between countries and is heavily influenced by specific country characteristics. The author highlights that the relation between elections and military expenditures is probably positive in countries where the defence industry holds political influence and economic power. This positive relationship also tends to prevail in countries facing serious security risks. Finally, Balestra and Caruso (2025) examine data from 103 US military manufacturing firms from 1996 to 2022. They conclude that in the year prior to election years, the increase in US defence revenues is lower compared to non-election years. However, during election years, the increase in defence revenues is higher compared to other years.

In arms-producing countries, increased budgets for the defence industry are encouraged during election times due to close relationships among politicians, the military, and the defence industry, commonly referred to as the military-industrial complex (e.g., Mayer 1992, 1995; Luechinger and Moser, 2014). During election periods, the defence industry seeks to preserve or even enhance its strategic position through various corporate political activities, that include revolving door (e.g., Luechinger and Moser, 2014), lobbying, or election campaign contributions (e.g., Belo et al., 2013; Kim, 2019; Blau et al., 2022). Thus, the incumbent leader may grant political favours to this industry, such as growing the annual defence budget.

Finally, Sabherwal et al. (2017) show that, unlike the stock market, which tends to improve during Democratic presidencies, "sin" stocks have a better performance in Republican presidencies and even more so when a Republican presidency is paired with a Republican majority in at least one chamber of Congress. They also find that the average contributions by sin firms to candidates for the presidency, Senate, and House of Representatives are larger for Republican candidates than for Democratic candidates. Consequently, the connections between those firms and politicians resulting from corporate contributions and lobbying activities are likely to be stronger for Republicans than for Democrats. According to the authors, this is another reason the business environment is likely to be more conducive for sin industry firms during Republican presidencies and when Republicans have a majority in Congress. Cooper et al. (2010) document a strong and robust correlation between the firm contributions measure and the firm's future abnormal returns. Additionally, different political ideologies can impact macroeconomic outcomes, making "Rational Partisan Theory" relevant to the stock market. Although Santa-Clara and Valkanov (2003) found higher stock market returns under Democratic presidents, Belo et al. (2013) emphasized the importance of industry and government spending. Specifically, since Republicans tend to favour military spending (Seiglie and Xiang, 2022), this may potentially boost returns during Republican presidencies, such as Trump. Therefore, Gurdgiev et al. (2022) highlight the existence of two different ideologies within the US bipartisan political system regarding military conflicts and defence spending. The authors argue that the Republican Party typically advocates for enlarged military and security involvement and spending, favouring the defence industry, while the Democratic Party appears to be less favourable towards it. They also conclude that a single party's control over the House of Representatives and the Senate has no significant effect on abnormal returns of the five largest US defence firms. However, solely having a Republican President significantly boosts excess returns for the defence stock market price compared to Democratic Party presidencies. Lastly, since market and size risk premiums differ significantly between Republican and Democratic presidencies, with higher required returns during Democratic administrations, Wisniewski (2016) suggests that investment risk increases under left-leaning governments, and the return distribution reflects risk compensation. When a Democratic president is elected, the required rate of return increases, causing investors to discount future cash flows, which in turn leads to a drop in stock prices around election announcements. Conversely, they suggest that stock prices may rise when a Republican is elected, as empirically confirmed by Snowberg et al. (2007).

2.2. Threat to European national security and defence industry

Klomp (2023a) argues that when there is a direct national security threat, there is a strong motivation to invest in military-strategic goods. In these situations, voters tend to place a higher value on military expenditures due to security concerns, leading their expenditure priorities to align more closely with those of politicians (e.g., Bove et al., 2017; Klomp, 2023a).

The ongoing conflict in Ukraine and increasing geopolitical tensions between Western countries and Russia have prompted numerous countries to boost defence spending to historical levels (e.g., Zhang et al., 2022). According to the authors, these two important factors (the Ukraine war and the increase of geopolitical tension) justify the existence of a particular flight mechanism in the US and European defence industry, called the flight-to-arms phenomenon. This trend occurs when investors aim to capitalise on the positive impacts of enlarged defence spending on the valuations of major defence contractors.

It is clear that the US is the major player in the defence industry worldwide (Gurdgiev et al., 2022). Additionally, the US defence industry's supremacy creates dependency for other nations on American defence technology. Consequently, the US defence sector provides political leverage and serves as a significant tool for foreign policy (Neuman, 2010). According to the authors, security guarantees are the strongest argument that the US has historically used to obtain military agreements with its allies. Many countries, especially numerous ones in Europe, have purchased U.S. defence goods primarily because these purchases are accompanied by U.S. security agreements. These security guarantees are the essential component of the deal, meaning that purchasing U.S. arms helps secure U.S. friendship and protection. The recent altercation that US President Donald Trump and Vice-President J.D. Vance had with Zelensky has led many Western leaders to conclude that the main reason for buying weapons from the US – US security guarantees – is no longer a convincing argument (e.g., Braw, 2025). This uncertainty is especially concerning because modern arms require continuous and technology updates. As a result, purchasers of these costly products must be completely confident that the selling country will remain cooperative, and that software and technology updates will be provided as needed. Even the slightest concern that Trump might choose to jeopardize friendly governments by withholding and technology updates for their military equipment could

lead these governments to reconsider their acquisitions of U.S. military technology.

Although many EU governments are hesitant to share defence sovereignty, opinion polls indicate strong support for unified EU policies, particularly in defence. Thus, this idea is surprisingly similar among Europeans in both Eastern and Western parts of the EU (Beetsma et al., 2024). Qari et al. (2024) using a survey-based discrete choice experiment to evaluate the direct welfare impact of defence policy, they show that the German population has a significant willingness to pay for increasing troop numbers, the creation of a European army and improvement in the air defence system. Finally, the White Paper for European Defence (European Commission, 2025) and the Draghi (2024) report highlight the importance of EU support the European industry. Draghi (2024) argues that EU should invest up to 5 % of GDP annually in strategic sectors like civil aeronautics, space, and defence. These investments are not just vital to the EU's competitiveness, they are also EU public goods, essential to EU security and strategic autonomy. Consequently, governments feel compelled to support or protect this industry for national interest (Heidenkamp et al., 2015).

A recent report by PWC (2025) on the global aerospace and defence industry demonstrates the existence of different growth dynamics between US and European defence firms. While the top six US defence firms reported an aggregate 4 % increase, European defence firms reported revenue increases of 13 % (PWC, 2025). While complete European self-reliance in arms production would appear unlikely, following the Trump-Zelensky meeting, EU and NATO countries announced a strategy to substantially increase their reliance on weapons systems manufactured in Europe – and decrease their reliance on weapons manufactured in the US – and to strengthen their defence capabilities, which largely explains the evolution of defence firm's revenues. In March 2025, the European Commission unveiled a plan to increase defence spending by about $840 billion,[1] while the European Investment Bank released plans to expand its military equipment financing and double its funding for security and defence projects (PWC, 2025).

Finally, the White Paper for European Defence and Draghi (2024) report advocates a more cohesive European industrial policy and coordination across member states to reach the scale required for global competition. The plan proposes to raise the value of intra-EU defence trade to 35 % of the total EU defence market by 2030, and it also seeks to certify that by 2030, at least 50 % of defence procurement by EU countries comes from European nations. Lastly, Draghi (2024) report proposes the principle of "Europe preference" as essential for the re-industrialization of Europe, ensuring that investment, procurement, and innovation prioritise European-made products and technologies.

2.3. Ukraine-Russia War: Effects on the defence stock market returns

Financial literature generally agrees that geopolitical events, like terrorist attacks or wars, positively impact the stock prices of defence firms.[2]

The short-term effect of the ongoing war Ukraine-Russia on defence firms was investigated by Martins (2024) and Martins et al. (2025). Both studies reveal the existence of a positive and statistically significant stock market price impact at the start of the war conflict. As explained by Martins et al. (2025), according to the asset-pricing perspective/expected cash flow hypothesis, Ukraine-Russia military conflict is expected to have a positive and significant effect on defence firms' stock prices.

In the case of the military conflict of Ukraine-Russia, there has been a growing demand for weapons and disclosure of augmented military budgets in the Western countries (particularly in Europe), thus contributing to higher expected cash flows for defence firms, and consequently to a rise in the stock price of these defence firms (e.g., Zhang et al., 2022).

Finally, Federle et al. (2022) refer that countries nearer to the war zone are probably experiencing serious negative spillovers and disaster risk – effects designated by the authors as "proximity penalty". According to the authors, the risk of disaster for neighbouring countries is likely to increase as they are geographically close to the original theatre of war. Countries close to military conflict are more exposed to an accidental violation of their borders or a nuclear incident. In the defence industry, this disaster risk results in an increase in the defence budgets of European countries, as well as higher sales and stock market price of defence firms.

2.4. Firm-Specific Determinants of defence stock market returns

We investigate the effect of firm-specific characteristics found significant in the financial literature on the defence abnormal returns. This includes size, profitability (ROA), liquidity, institutional ownership, leverage, R&D intensity, capital expenditure (operating risk) and weight of sales to governments (arms revenues as a percentage of total revenues).

The first five variables are firm-specific standard control variables. In analysing the defence industry, R&D and capital expenditure are two crucial control variables that impact industry performance. Zhong and Gribbin (2009) employ capital intensity as an indicator of operating risk. The higher intensity indicates that a firm has a significant amount of fixed costs compared to its total costs. If the demand for defence products decreases due to political shifts or the conclusion of a war, firms in the defence industry with more capital intensity are more severely affected by declines in defence sales, leading to greater damage to their profits. The authors state that providing appropriate profit incentives for the risks taken by firms in the defence industry is essential for attracting and retaining high-quality defence suppliers, particularly during periods of high demand for defence products. As for innovation, Rogerson (1989) emphasises that innovation would have a positive correlation with the profit rates of defence contractors. For governments, maintaining a competitive advantage in defence over the enemy is crucial, making it essential to lead in the development of advanced defence

[1] https://www.reuters.com/world/us-officials-object-european-push-buy-weapons-locally-2025–04-02/ and https://www.reuters.com/business/aerospace-defense/eu-proposes-joint-defence-push-amid-russia-fears-us-worries-2025–03-19/.

[2] Please see Martins (2024) and Martins et al. (2025), for a review of the main empirical studies on the subject.

products. This author highlights that the most effective strategy for governments to incentivise innovation in defence firms is to permit them to generate positive economic profits, thereby generating "prizes for innovation". This approach is crucial because monitoring a firm's innovation efforts and the quality of the resulting innovations is challenging.

Finally, the captured regulator theory advocates a positive relation between the influence of defence suppliers and their performance (e.g., Karpoff et al., 1999; McGowan and Vendrzyk, 2002). McGowan and Vendrzyk (2002) provide evidence of excessive profitability in the defence industry, which suggests the regulator is captured, allowing defence contractors to obtain high economic profit from government sales. As mentioned before, defence firms usually build political connections by engaging in lobbying activities or contributing to political action committees (e.g., Belo et al., 2013; Kim, 2019; Blau et al., 2022). Therefore, this theory suggests that government segments are expected to be more lucrative than mixed or commercial segments. Martins (2024) and Martins et al. (2025) found higher market returns for the portfolios with a larger weight of defence sales, which aligns with the captured regulator theory.

3. Research Hypotheses, data and methodology

3.1. Research hypotheses

According to the political business cycle theory, elections in the major-producing country (United States) may expand the sales revenues of defence firms and stock market returns (e.g., Klomp, 2023a). Furthermore, given D. Trump's victory in the 2024 US presidential election (Republican party), there tends to be an expectation among investors that there will be greater military support and involvement and spending on security, favouring the defence industry (e.g., Gurdgiev et al., 2022) and a greater performance of equity shares of this industry (e.g., Sabherwal et al., 2017). Therefore, we study the following research hypothesis:

> [H1] The 2024 US presidential election (November 5, 2024) is associated with a significant positive stock market effect for defence firms in general.

In the previous section, it is mentioned that the recent Trump-Zelensky meeting led many Western leaders to conclude that the main reason for buying weapons from the US – US security guarantees – is no longer a convincing argument. In Europe there is an awareness of the need for a rapid increase in military spending for self-defence purposes. This meeting reinforced the need for greater European cohesion and to ensure the application of the principle of "Europe preference" in the acquisition of weapons (e.g., Draghi, 2024). It is therefore expected that arms purchases from the US will gradually be replaced by European weapons, thus expecting an increase in the returns of European defence firms and a fall in the prices of US firms. Our study analyses the following research hypothesis:

> [H2] The Trump-Zelensky Meeting (February 28, 2025) is associated with a significant positive stock market effect for defence firms, especially for European firms.

Since the cross-section analysis allows us to analyse if abnormal returns are affected by firm-specific characteristics of defence firms, with emphasis on investment in R&D, capital expenditure and sales to government segments, we analyse the following hypothesis:

> [H3] CARs vary across defence firms and are driven by firm-specific characteristics.

3.2. Data

We begin our sample selection by identifying the largest defence firms in Europe and the U.S., constructed on their market capitalisation. To create a comprehensible sample for our empirical study, we use several exclusion criteria, inspired on the work of (Capelle-Blancard and Couderc, 2008)Capelle-Blancard and Couderec (2008). Specifically, we drop out of the sample: (*i*) family-owned firms;(*ii*) fully state-owned firms; (*iii*) firms whose defence revenue is below 10 % of their total revenue over the last two years. Following these exclusions, we focus on the largest 100 defence firms based on market capitalisation. Appendix I presents the list of defence firms included in the sample. Table 1 illustrates the distribution of defence firms by country and the country benchmarks used to calculate the abnormal returns of defence firms in each country.

The data for this study were gathered from various sources. Daily defence stock prices and country benchmark indices were collected from the Refinitiv Eikon database. The five factors identified by Fama and French (2015) were sourced from Kenneth French's homepage at Dartmouth College.[3] In the calculation of abnormal returns, we apply the US-market-based Fama-French factors to the US firms and the European-market-based Fama-French factors to the European firms, including Turkey. Finally, except for variable government sales, the other firm-specific variable data (computed from the end-of-year accounting figures before the events) were gathered from ORBIS and Refinitiv Eikon databases. Government sales variable (arms revenues as a % of total revenues) was constructed from the most recent SIPRI Top 100[4] annual reports and individual reports and accounts of defence firms, accessible on their website.

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

[4] https://www.sipri.org/visualizations/2024/sipri-top-100-arms-producing-and-military-services-companies-world-2023.

Table 1
Sample of Defence Listed Firms by Country.

Distribution by Countries					
Country	**# Firms**	**Country Benchmark**	**Country**	**# Firms**	**Country Benchmark**
Austria	1	ATX	Norway	3	Oslo All Shares
Denmark	1	OMX Copenhagen 20	Sweden	10	OMX Stockholm 30
France	9	CAC 40	Switzerland	1	Swiss Market Index
Germany	6	DAX	Turkey	5	BIST 100
Italy	4	FTSE Italia All Share	UK	7	FTSE 100
Netherlands	1	AEX Index	US	52	Dow Jones Industrial Average

This table shows the sample of defence listed firms by country and the country benchmarks used to calculate the abnormal returns of defence firms in each country. "# Firms" means the number of defence-listed firms.

3.3. Event study methodology

To evaluate the research hypothesis presented in section 3.1., we apply the standard abnormal returns methods using the market model and the Fama and French (2015) five-factor model.[5] We use two event dates: (i) November 5, 2024, date of the US presidential election, and (ii) February 28, 2025 – date of Trump-Zelensky meeting, to compute the abnormal returns (ARs). We calculated the market model ARs estimating the residual returns based on the following regression specification:

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

where, R_{it} is the risk premium for firm i on the trading day t; R_{mt} refers to the observed market risk premium, which is calculated by subtracting the risk-free rate from the market return on the trading day t; α_i and β_i refer to the estimation 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.

The event date is nominated as day $t = 0$. Fig. 1 illustrates the event timeline used to calculate the ARs. ARs are computed by deducting the expected return produced by the market model and by the Fama and French five-factor model from the observed returns of defence firm i on day t, as follows:

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

In the next step, by accumulating the abnormal returns over a particular time interval, we compute the cumulative abnormal returns (CARs) based on the following specification:

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

We use seven different 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 compute the cumulative average abnormal returns (CAARs) using the following specification:

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

where, N represents the sample size of the sample (that is N = 100).

To assess the statistical significance of CAARs, we compute both parametric and non-parametric tests. The first is used in Brown and Warner (1980) without crude dependence adjustment. The second is the Corrado (1989) rank test. Additional information about the tests can be found in Serra (2004).

Finally, to analyse the existence of differences in terms of abnormal returns by region (U.S. *vs* Europe) and by government sales (arms revenues in the percentage of total returns), we compute the CAARs and assess the differences within each portfolio. We examine the statistical significance of these differences using a two-sample *z*-test.

[5] For further information, please look at the works of MacKinlay (1997) and Serra (2004).

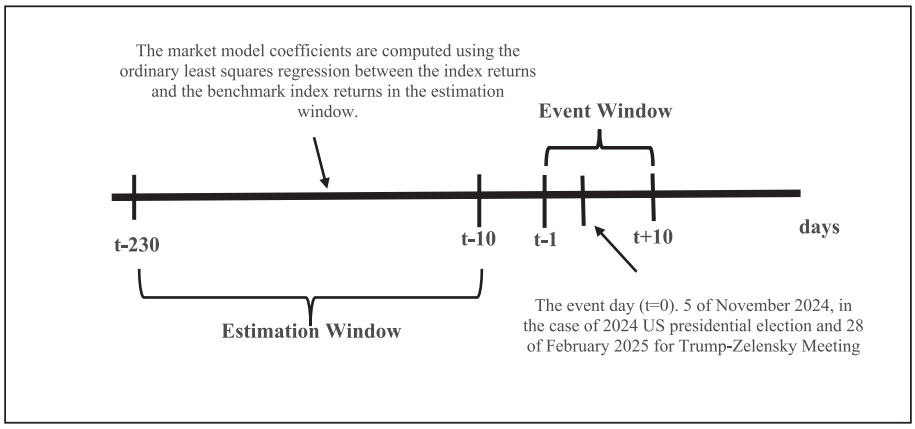

Fig. 1. Event Timeline The figure illustrated the event timeline used to compute ARs around the two event studies: (*i*) 2024 US presidential election and (*ii*) Trump-Zelensky Meeting, for the largest 100 listed defence firms worldwide.

3.4. Cross-Section analysis

To evaluate the last research hypothesis, we estimate by Ordinary Least Squares (OLS) the Equation (6), to observe the effects of firm-specific characteristics on the cross-sectional variations of CARs.

$$CAR_i = \beta_0 + \beta_1 \ln(SIZE_i) + \beta_2 LEV_i + \beta_3 LIQ_i + \beta_4 ROA_i + \beta_5 \text{INST} + \beta_6 CAPEX_i + \beta_7 R\&D_i + \beta_8 GOV\_S_i + \varepsilon_i \quad (6)$$

where CAR_i refers to the cumulative abnormal returns for defence stock *i*; $SIZE_i$ refers to the market capitalization in USD (natural logarithm) for defence stock *i*; LEV_i refers to the ratio of total liabilities to total assets (%) for defence stock *i*; LIQ_i refers to the ratio of current assets to total assets (%) for defence stock *i*; ROA_i refers to the ratio of operating income to total average assets (%) for defence stock *i*; $INST_i$ refers to the percentage of firm's stock that is held by institutional investors; $CAPEX_i$ refers to the ratio of capital expenditures to sales (%) for defence stock *i*; $R\&D_i$ refers to the ratio of R&D to sales (%) for defence stock *i*; GOV_S_i measure of sales to the government segment, computed by the ratio between arms revenues and total revenues (%) for defence stock *i*. Table 2 presents the definition of each variable and expected relationship.

Firm size, leverage, liquidity, profitability, and institutional ownership ratio are standard control firm-specific variables (e.g., Martins, 2024; Martins et al., 2025). In addition to these variables, the *CAPEX* variable is included because, as previously mentioned, providing proper profit reward for the risks taken by defence firms is crucial for attracting and maintaining high-quality defence suppliers, especially during periods of high demand for defence products (Zhong and Gribbin, 2009). Another critical variable for maintaining a competitive advantage over the enemy in defence is *R&D* (Rogerson, 1989). The author emphasises that innovation should be positively linked to the profit of defence contractors to encourage their efforts in innovation. Finally, we also include the variable *GOV_S*, because according to the captured regulator theory, government segments are expected to be more lucrative than mixed or commercial segments.

4. Results

4.1. Abnormal return

Table 3 shows evidence of the defence's CARs in relation to the two events. The outcomes show a statistically significant positive stock market impact in both events for the seven-time intervals. This table presents CARs of 1.525 % and 5.833 % (MM) and 1.469 % and 5.509 % (FF5) for the time windows [-1;1] and [0;5], respectively around the US 2024 presidential election; and 2.813 % and 6.243 % (MM) and 2.519 % and 4.706 % (FF5) for the time windows [-1;1] and [0;5], respectively around the Trump-Zelenski meeting.

Regarding the 2024 US presidential election, these results provide strong evidence supporting the hypothesis [H1], indicating that positive abnormal returns do indeed exist, aligning with asset pricing perspective/expected cash flow hypothesis and political business cycle theory, that election in the major-producing country like US may expand the sales revenues of domestic firms in defence industry and their stock market returns (e.g., Klomp, 2023 a). Furthermore, previous empirical evidence reveals that Republican party victory in US elections is typically associated with greater military support and involvement and spending on security, favouring the defence industry (e.g., Gurdgiev et al., 2022) and a greater performance of equity shares of this industry (e.g., Sabherwal et al., 2017).

The outcomes also provide strong evidence supporting the hypothesis [H2], revealing the presence of positive and statistically significant abnormal returns for the sample of defence listed firms. Panel 1 of Table 4 also reveals the presence of heterogeneous abnormal returns between US and European defence firms for both events analysed. While when D. Trump won the 2024 US presidential election, there were higher positive abnormal returns for US defence firms than for European ones, with the test for the

Table 2
Determinants of CARs: Definition of Variables and Expected Relationships.

Variable	Notation	Measure	Author(s)	Expected Effect
Size	**SIZE**	Natural logarithm of market capitalization in USD	Astakhov et al. (2019)	+/-/No
Leverage	**LEV**	Ratio of total liabilities to total assets (%)	Almeida et al. (2004);Bates et al. (2009)	−/No
Liquidity	**LIQ**	Ratio of current assets to total assets (%)	Almeida et al. (2004);Bates et al. (2009)	+/No
Profitability	**ROA**	Ratio of operating income to total average assets (%)	Hao et al. (2011)	+/-/No
Institutional Ownership	**INST**	Percentage of a firm's stock that is held by institutional investors	La Porta et al. (2002);Boehmer and Kelley (2009)	+/No
Capital Expenditure (Operating Risk)	**CAPEX**	Ratio of capital expenditures to sales (%)	Zhong and Gribbin (2009)	+
R&D Intensity	**R&D**	Ratio of research and development expenditures to sales (%)	Rogerson (1989)	+
Government Sales	**GOV_S**	Arms revenues as a % of total revenues	Martins (2024) and Martins et al. (2025)	+

This table presents the notation, definitions, and expected effect of control variables in Equation (6) on the defence's Cumulative Abnormal Returns (CARs). "**No**" means the absence of a statistically significant effect.

Table 3
CAARs and Tests for the Significance of Abnormal Returns.

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]	1.525 %	5.381 %	−1.634 %	1.513 %	4.735 %	0.090*	0.061*
CAAR [-1,5]	5.513 %	8.522 %	0.444 %	3.512 %	9.877 %	0.000***	0.000***
CAAR [-1,10]	5.240 %	13.143 %	−2.500 %	3.912 %	8.465 %	0.004***	0.000***
CAAR [-5,5]	4.449 %	9.983 %	−0.874 %	3.076 %	9.845 %	0.009***	0.014**
CAAR [0,2]	2.286 %	5.368 %	−0.606 %	1.749 %	5.628 %	0.011**	0.044**
CAAR [0,5]	5.833 %	8.695 %	0.826 %	3.759 %	9.641 %	0.000***	0.000***
CAAR [0,10]	5.561 %	13.404 %	−3.015 %	4.336 %	8.932 %	0.001***	0.000***
Event 2: Trump-Zelensky Meeting (February 28, 2025)							
CAAR [-1,1]	2.813 %	8.913 %	−1.963 %	2.252 %	6.989 %	0.005***	0.013**
CAAR [-1,5]	7.507 %	23.418 %	−3.007 %	3.716 %	13.669 %	0.000***	0.000***
CAAR [-1,10]	9.579 %	26.760 %	−0.499 %	6.402 %	18.529 %	0.000***	0.000***
CAAR [-5,5]	7.725 %	28.332 %	−4.294 %	5.052 %	18.285 %	0.000***	0.000***
CAAR [0,2]	3.961 %	15.539 %	−2.443 %	1.496 %	7.312 %	0.000***	0.009***
CAAR [0,5]	6.243 %	21.708 %	−3.264 %	2.789 %	10.683 %	0.000***	0.000***
CAAR [0,10]	8.316 %	25.064 %	−0.515 %	5.636 %	15.238 %	0.000***	0.000***
Panel 2: FIVE-FACTOR MODEL OF FAMA AND FRENCH (2015) (FF5)							
Event 1: 2024 US Presidential Elections (November 5, 2024)							
CAAR [-1,1]	1.469 %	5.516 %	−1.617 %	2.270 %	4.873 %	0.094*	0.065*
CAAR [-1,5]	5.123 %	8.530 %	0.485 %	3.535 %	9.231 %	0.011**	0.010***
CAAR [-1,10]	4.135 %	12.662 %	−3.019 %	3.169 %	7.926 %	0.013**	0.007***
CAAR [-5,5]	4.041 %	9.765 %	−2.299 %	3.306 %	8.004 %	0.025**	0.022**
CAAR [0,2]	3.103 %	5.219 %	−0.043 %	3.132 %	5.984 %	0.019**	0.043**
CAAR [0,5]	5.509 %	8.539 %	1.094 %	4.063 %	8.950 %	0.000***	0.001***
CAAR [0,10]	4.521 %	12.866 %	−3.189 %	3.114 %	8.832 %	0.012**	0.009***
Event 2: Trump-Zelensky Meeting (February 28, 2025)							
CAAR [-1,1]	2.519 %	11.067 %	−4.063 %	2.113 %	7.030 %	0.022**	0.028**
CAAR [-1,5]	5.058 %	24.975 %	−6.554 %	1.155 %	14.763 %	0.018**	0.011**
CAAR [-1,10]	5.881 %	28.964 %	−6.123 %	3.229 %	17.578 %	0.036**	0.031**
CAAR [-5,5]	5.227 %	31.784 %	−10.080 %	2.898 %	16.072 %	0.042**	0.039**
CAAR [0,2]	3.356 %	16.434 %	−4.651 %	2.287 %	6.688 %	0.044**	0.040**
CAAR [0,5]	4.706 %	22.651 %	−5.211 %	2.108 %	10.942 %	0.018**	0.011**
CAAR [0,10]	5.529 %	26.590 %	−5.443 %	3.070 %	16.795 %	0.015**	0.012**

This table shows the Cumulative Average Abnormal Returns (CAARs) of defence industry 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. Two event dates are considered: 1) 2024 US Presidential Elections (November 5, 2024) and 2) Trump-Zelensky Meeting (February 28, 2025). 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.

Table 4
Defense Firm's CAARs by Region (US vs Europe) and Arms Revenues in the Percentage of Total Revenues and Difference Test for CAARs.

			[-1; +1]	[-5; +5]	[-5; +10]	[-10; +10]	[-1; +1]	[-5; +5]	[-5; +10]	[-10; +10]
Panel 1: European Defence Firms Vs US Defence Firms										
	# Firms		2024 US Presidential Election	Trump-Zelensky Meeting						
European Defence Firms	48	CAAR	0.524 %	5.326 %	3.223 %	2.705 %	7.154 %	19.063 %	21.661 %	26.949 %
		θ_1	0.488	2.592***	1.300	1.525	8.644***	12.029***	11.333***	12.307***
		τ_1	0.637	2.670***	1.438	1.488	6.069***	7.638***	5.395***	5.399***
US Defence Firms	52	CAAR	2.427 %	3.659 %	5.036 %	4.395 %	−1.195 %	−2.740 %	−1.152 %	−5.708 %
		θ_1	2.047**	1.895*	2.109**	1.988**	−0.712	−0.852	−0.297	−1.285
		τ_1	2.088**	1.901*	2.376**	1.961**	−0.682	−0.985	−0.542	−1.142
Difference	CAAR	−1.903 %	1.667 %	−1.813 %	−1.690 %	8.349 %	21.803 %	22.813 %	32.657 %	
	z-test									
(p-value)	0.037**	0.202	0.255	0.296	0.000***	0.000***	0.000***	0.000***		
Panel 2: Arms Revenues in Percentage of Total Revenues										
	# Firms		2024 US Presidential Election	Trump-Zelensky Meeting						
Above the Median	50	CAAR	2.261 %	4.612 %	4.208 %	4.311 %	6.088 %	16.345 %	19.853 %	24.591 %
		θ_1	2.012**	2.112**	2.055**	2.001**	5.805***	8.132***	8.197***	8.863***
		τ_1	2.055**	2.134**	2.065**	1.994**	3.752***	5.396***	5.897***	5.062***
Below the Median	50	CAAR	0.601 %	1.502 %	0.607 %	0.652 %	−1.096 %	−2.847 %	−5.992 %	−6.469 %
		θ_1	0.504	1.345	0.444	0.412	−1.503	−1.711*	−2.220**	−2.155**
		τ_1	0.611	1.399	0.465	0.423	−1.611	−1.725*	−2.255**	2.167**
Difference	CAAR	1.660 %	3.110 %	3.601 %	3.659 %	7.184 %	19.192 %	25.845 %	31.060 %	
	z-test									
(p-value)	0.069*	0.034**	0.032**	0.039**	0.000***	0.000***	0.000***	0.000***		

This table presents the firm's cumulative average abnormal returns (CAARs) to 2024 US presidential election and Trump-Zelensky meeting and the differences in the CAARs across different subsamples. Panel 1 presents the defence firm's CAARs for two subsamples of regions: (*i*) European defence firms and (*ii*) US defence firms. Panel 2 presents the firm's CAARs for two subsamples of firms in terms of the arms revenues in the percentage of total revenues: (*i*) above the median; (*ii*) below the median. The CAARs were estimated using the Fama-French five-factor model (FF5) for four different time windows [-1;+1]; [-5;+5]; [-5;+10] and [-10,+10. θ_1 and τ_1 are the *t*-test statistics and Corrado rank test statistics, respectively of Brown and Warner (1980) and Corrado (1989) (see Serra, 2004, for more details). The significance of the differences in CAARs is determined via two-sample *z*-test. *, ** and *** denote statistical significance at the 10 %, 5 % and 1 % level, respectively.

abnormal returns differences proving to be statistically significant, in the case of the Trump-Zelensky meeting, there were very high and significant abnormal returns for European defence firms (7.154 % and 21.661 %, for the time windows [-1;1] and [-5;10], respectively), while US defence companies did not show statistically significant abnormal returns. This last result is explained by the failure of security guarantees given by the US to the European countries. It is also explained by the awareness of the need for a rapid increase in military spending for self-defence purposes in Europe. This meeting reinforced the need for greater European cohesion and to ensure the application of the principle of "Europe preference" in the acquisition of weapons (e.g., Draghi, 2024). As a result of this meeting, expectations were created in the markets that US arms purchases would gradually be replaced by European weapons, giving rise to investor expectations of increased returns for European defence firms to the detriment of US defence firms.

Finally, the outcomes in Panel 2 of Table 4 evidence a positive stock market reaction for defence firms with a higher proportion of arms sales to the government. The other defence firms present returns with no statistical significance (2024 US presidential election) or negative significant abnormal returns (Trump-Zelensky Meeting). Abnormal return differences show that the differences are statistically significant. This pattern of market price behaviour aligns with the financial literature, supporting the argument that the regulators are compromised, allowing defence contractors to obtain significant economic profit from government sales (e.g., Karpoff et al., 1999; McGowan and Vendrzyk, 2002).

4.2. Cross-Sectional analysis

We also analyse the cross-section effects of firm-specific characteristics variables on CARs in the two events. The results of this cross-section estimation are presented in Table 5.

The outcomes reveal that the coefficients for the *R&D* and *CAPEX* variables are both positive and statistically significant. As discussed in section 2.4, an adequate profit reward for risks and innovation is crucial for attracting and retaining high-quality defence suppliers and products. Financial literature suggests that the best approach for governments to encourage defence firms to engage in risk-taking and innovation is by allowing them to achieve positive economic profit. Consequently, we anticipate higher abnormal returns for defence firms that demonstrate greater intensity in R&D and capital expenditure.

A positive and statistically significant coefficient is also found for *GOV_S* variable. This result supports the argument that regulatory capture is occurring, and that an excess of profitability is probable for the defence firms with a larger weight in arms sales to the government segment. Similar results were reported by Martins (2024) and Martins et al. (2025).

4.3. Robustness checks

We conducted additional robustness checks to assess the sensitivity of our findings using a technology-intensive index as the market benchmark index, three different pre-election campaign dates with substantive disclosures indicating changes in defence industry contracting, demand, or budgetary supports, and elimination of firms with potential confounding information (i.e., earnings announcements, quarterly results, or dividends). Table 6 presents the CAARs for the two initial dates – the 2024 US Presidential election (November 5, 2024) and the Trump-Zelensky meeting (February 28, 2025) – calculated using a technology-intensive index, in this case the S&P Global Technology Select Sector Index,[6] as the market benchmark. The CAARs are positive and statistically significant for the market model and Fama-French five-factor model. The general conclusions of the study remained unchanged with this robustness analysis.

Second, as Malatesta and Thompson (1985) point out, the possibility that a given event was anticipated by the market cannot be excluded. The potential anticipation of the effects caused by the election or informationally pre-announced signals on future weapons trade regime, procurement, budgetary priorities, and geoeconomic policies has the potential to drive abnormal returns to the defence industry. In this sense, we test the impact of three pre-election campaign dates with substantive disclosures indicating changes in defence industry contracting, demand, or budgetary support to establish whether or not the observed reaction to the election day outcome alone is spurious. We select three pre-election dates: (*i*) February 10, 2024 – date of D. Trump speech, which refers that the US should not protect a NATO country that is in default on its payments; (*ii*) March 11, 2024 – date of official presentation of President's Fiscal Year 2025 budget for the Department of Defence; and (*iii*) August 26, 2024 – date on which, during D. Trump's campaign, he promised to create the National Space Guard and made demands for increased defence spending from NATO countries. Table 7 presents the results. For the three pre-election dates mentioned, no statistically significant CAARs were observed.[7]

Finally, following recommended practice (e.g., MacKinlay, 1997; McWilliams and Siegel, 1997; Fornell et al., 2006; Sorescu et al., 2017; Fotheringham and Wiles, 2023), we checked for confounding effects during the five day window immediately surrounding the US presidential election. The second half of October and the first week of November 2024 were marked by a large number of quarterly results reports being released by defence firms. According to Capelle-Blancard and Couderc (2008: 25) "*earnings related news releases are the most frequent factor influencing the market value of firms in the defence industry*". Consequently, we collected all earnings related

[6] Information about the index is available here: https://www.spglobal.com/spdji/en/indices/equity/technology-select-sector-index/#data.

[7] Due to space limitations, in addition to the results presented in Table 7, CAARs were also calculated using the market model and the technological index referred to in the previous point, obtaining results identical to those presented in the Table 7.

Table 5
Cross-Sectional Analysis.

	2024 US Presidential Election		Trump-Zelensky Meeting	
	CAR [-1;1]	CAR [-1;5]	CAR [-1;1]	CAR [-1;5]
Constant	−0.054	0.099	−0.075	−0.115
	(−0.709)	(0.904)	(−1.311)	(−1.534)
Ln(SIZE)	−0.002	−0.004	0.005**	0.005
	(−1.408)	(−1.555)	(2.438)	(1.207)
LEV	−0.009	−0.008	−0.010	−0.015
	(−0.689)	(−0.536)	(−0.845)	(−0.976)
LIQ	0.084**	0.075**	0.092**	0.099**
	(2.229)	(2.036)	(2.423)	(2.155)
ROA	0.135**	0.093*	0.122**	0.161**
	(2.350)	(1.694)	(2.345)	(2.303)
INST	0.010	0.018	0.027	0.039
	(1.274)	(1.333)	(1.561)	(1.611)
CAPEX	0.244***	0.251***	0.341***	0.377***
	(3.364)	(2.934)	(3.567)	(3.634)
R&D	0.225***	0.219***	0.285***	0.297***
	(3.004)	(2.876)	(3.145)	(3.177)
GOV_S	0.041*	0.045*	0.112***	0.137***
	(1.844)	(1.822)	(3.575)	(3.661)
# Obs.	100	100	100	100
Adj. R^2	0.347	0.335	0.366	0.389

This table displays the cross-sectional estimations for the 100 largest listed defence CARs' around the 2024 US presidential election and Trump-Zelensky meeting. The dependent variables are the defence's CARs for two different time windows: [-1;+1] and [-1;+5], computed using the French five-factor model (FF5). The defence-specific variables are computed from accounting data based in the prior year-end. These control variables are defined on Table 2. ***, ** and * means statistical significance at the 1 %, 5 % and 10 % level, respectively. Standard errors adjusted for heteroskedasticity and clustering at the country level are reported in parentheses. # Obs. denotes the number of observations used in the estimation.

news items within a five day window before and after the 2024 US presidential election.[8] An identical procedure was adopted by Fornell et al. (2006). This step resulted in the exclusion of 34 defence firms from the dataset. Table 8 presents the results for the remaining defence firms in the sample. The general conclusions of the study did not change when we eliminated defence firms with potential confounding information.

5. Conclusion

This research examines the short-term market impact of the US and European largest defence firms to the 2024 US presidential election and the Trump-Zelensky meeting. According to political business cycle theory and asset-pricing perspective/expected cash flow hypothesis, we expect a positive and significant effect on defence stock prices around the 2024 US presidential election. National elections in arms-producing countries lead to a growth in sales revenues for defence firms, which tend to be higher when the Republican Party candidate wins the US elections (e.g., Sabherwal et al., 2017). As a result, this leads to higher cash flow of defence firms and, therefore, to a rise in the stock market price of these firms.

Our results also disclose the presence of heterogeneous abnormal returns for US and European defence firms around Trump-Zelensky meeting. European defence firms present high and statistically significant positive returns while US defence firms show non-significant abnormal returns. This meeting made it clear to European countries that the US security guarantee was compromised and that there was an urgent need to increase the defence budgets of European countries, with a clear preference for weapons produced in Europe (e.g., Draghi, 2024). The abnormal return of 7,154 % observed in the time window [-1;1] for European defence firms and the absence of statistically significant abnormal returns for US firms are thus explained by the existence of a substitution effect and an increase in demand for defence products by European countries.

Finally, our results allow us to conclude that stock market impacts are reinforced or mitigated by firm-specific characteristics. We show that defence-listed firms with a history of higher profitability and liquidity experience superior stock market returns around the two events. We also evidence higher abnormal returns for firms in the defence industry with higher R&D and capital expenditure intensity. For the firms in the defence industry, it is crucial to attract and retain high-quality defence suppliers and products, as well as to provide profit rewards for risks and innovation. Based on the existing literature, the best strategy for governments to encourage firms in the defence industry to take risks and invest in innovation is to let them earn positive economic profit (e.g., Rogerson, 1989; Zhong and Gribbin, 2009). Lastly, we observe that defence firms that generate a larger portion of their sales from the government segment tend to achieve better market returns, which, according to the captured regulator theory, tends to be often more lucrative than mixed or commercial segments (e.g., McGowan and Vendrzyk, 2002).

[8] Like McWilliam and Siegel (1997), Sorescu et al. (2017) and Fotheringham and Wiles (2023), we also checked for potential confounding information during the three day window immediately surrounding the US presidential election. The results do not differ significantly from those presented in Table 8.

Table 6
CAARs and Tests for the Significance of Abnormal Returns: Robustness Results with a Technology-Intensive Sub-Index.

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]	2.368 %	5.697 %	−1.187 %	2.425 %	5.294 %	0.048**	0.050**
CAAR [-1,5]	5.886 %	8.879 %	0.651 %	4.297 %	10.412 %	0.000***	0.000***
CAAR [-1,10]	5.395 %	13.580 %	−2.957 %	3.039 %	9.856 %	0.003***	0.000***
CAAR [-5,5]	4.009 %	9.940 %	−2.178 %	2.516 %	8.225 %	0.012**	0.014**
CAAR [0,2]	3.206 %	5.333 %	0.101 %	3.227 %	6.329 %	0.007***	0.009***
CAAR [0,5]	6.334 %	9.019 %	−0.046 %	4.545 %	11.430 %	0.000***	0.000***
CAAR [0,10]	5.807 %	13.847 %	−2.886 %	3.209 %	10.315 %	0.002***	0.003***
Event 2: Trump-Zelensky Meeting (February 28, 2025)							
CAAR [-1,1]	3.644 %	8.761 %	−0.507 %	2.746 %	7.701 %	0.002***	0.004***
CAAR [-1,5]	7.464 %	23.835 %	−3.506 %	3.551 %	14.825 %	0.000***	0.000***
CAAR [-1,10]	8.531 %	27.506 %	−1.619 %	5.146 %	17.269 %	0.000***	0.000***
CAAR [-5,5]	7.674 %	29.130 %	−4.249 %	5.125 %	18.439 %	0.000***	0.000***
CAAR [0,2]	3.334 %	15.908 %	−3.157 %	2.925 %	7.081 %	0.001***	0.003***
CAAR [0,5]	5.941 %	22.257 %	−3.834 %	1.993 %	12.328 %	0.000***	0.000***
CAAR [0,10]	7.008 %	25.951 %	−2.576 %	3.741 %	16.291 %	0.000***	0.000***
Panel 2: FIVE-FACTOR MODEL OF FAMA AND FRENCH (2015) **(FF5)**							
Event 1: 2024 US Presidential Elections (November 5, 2024)							
CAAR [-1,1]	1.433 %	4.903 %	−2.421 %	0.266 %	2.975 %	0.095*	0.084*
CAAR [-1,5]	3.888 %	8.274 %	−0.893 %	3.048 %	7.327 %	0.004***	0.006***
CAAR [-1,10]	4.304 %	12.882 %	−2.178 %	3.050 %	7.448 %	0.016**	0.018**
CAAR [-5,5]	4.034 %	9.639 %	−2.338 %	4.503 %	7.389 %	0.029**	0.030**
CAAR [0,2]	2.781 %	5.500 %	−0.995 %	2.713 %	5.774 %	0.045**	0.048**
CAAR [0,5]	4.447 %	8.542 %	−1.034 %	3.563 %	8.334 %	0.000***	0.000***
CAAR [0,10]	4.863 %	13.345 %	−3.312 %	3.273 %	8.305 %	0.004***	0.006***
Event 2: Trump-Zelensky Meeting (February 28, 2025)							
CAAR [-1,1]	3.897 %	9.794 %	−0.425 %	2.894 %	7.944 %	0.001***	0.002***
CAAR [-1,5]	7.589 %	24.427 %	−2.718 %	3.595 %	17.301 %	0.000***	0.000***
CAAR [-1,10]	9.157 %	28.225 %	−1.240 %	5.208 %	18.276 %	0.000***	0.000***
CAAR [-5,5]	7.446 %	29.806 %	−4.424 %	4.619 %	17.897 %	0.001***	0.002***
CAAR [0,2]	3.186 %	16.624 %	−3.668 %	2.376 %	7.905 %	0.009***	0.011**
CAAR [0,5]	5.783 %	22.714 %	−3.806 %	2.070 %	12.934 %	0.001***	0.001***
CAAR [0,10]	7.351 %	26.469 %	−2.798 %	3.408 %	17.173 %	0.002***	0.003***

This table shows the Cumulative Average Abnormal Returns (CAARs) of defence industry 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, using the S&P Global Technology Select Sector Index as market benchmark (a technology intensive index). Two event dates are considered: 1) 2024 US Presidential Elections (November 5, 2024) and 2) Trump-Zelensky Meeting (February 28, 2025). 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.

Our results provide new insights useful for investors, management, financial analysts, and governments. First, the importance of electoral cycles in arms-producing countries for the defence industry. Our findings provide some clues for investors to optimize investment and hedging strategies through industry and country diversification. Second, the recent arms race (e.g., Zhang et al., 2022) poses important challenges for society and governments, as it will lead to an increase in defence budgets in Europe, which could lead to higher public debt, increased cost of equity, and cuts in public spending in key areas. This trend has the potential to adversely impact economic growth. Third, the change in the perception of US security guarantees to European countries led these countries to consider that self-sufficiency in the supply of weapons is a high priority. After the meeting between Trump and Zelensky, several defence analysts reported that the US had abandoned its allies and discarded security guarantees to European countries, which they said was a bad strategy for the US defence business.[9] The results we obtained point in this direction. For arms exporting countries, it will be important to rethink whether this strategy is the most appropriate.

Although our study offers valuable insights, it is crucial to acknowledge its limitations. A fundamental aspect of any event study is the accuracy of event dates. Despite the robustness tests performed in the study, the existence of other US presidential campaign dates that hold important information about the future of the supply and demand for military products cannot be excluded. Second, like most event studies, our results only address the short-term market reaction of defence industry to those events. We believe that richer insights could be gained by using a longer sample period and including other electoral periods, not only from the US presidential elections but also from other arms-producing countries. Future studies should also analyse the potential differences in the persistency of returns for defence stocks as opposed to general markets, and within the defence stocks, for European defence firms compared to the US defence firms.

[9] https://foreignpolicy.com/2025/03/04/trump-zelensky-vance-ukraine-defense-arms/.

Table 7
Three Pre-Election Campaign Dates: CAARs and Tests for the Significance of Abnormal Returns.

Variable	Mean	SD	25th perc.	Median	75th perc.	θ_1	τ_1
Date 1: D. Trump Speech About Not Protecting a NATO Country that is in Arrears with Its Payments. (February 10, 2024)							
CAAR [-1,1]	0.953 %	7.558 %	−1.192 %	−0.123 %	2.513 %	0.535	0.520
CAAR [-1,5]	2.822 %	16.563 %	−1.719 %	0.828 %	5.018 %	0.230	0.235
CAAR [-1,10]	1.535 %	14.533 %	−2.903 %	0.534 %	4.933 %	0.617	0.608
CAAR [-5,5]	2.086 %	18.711 %	−2.656 %	0.961 %	4.655 %	0.478	0.469
CAAR [0,2]	1.400 %	5.093 %	−0.882 %	0.833 %	3.229 %	0.363	0.357
CAAR [0,5]	1.887 %	13.167 %	−2.373 %	0.539 %	4.051 %	0.386	0.379
CAAR [0,10]	0.600 %	11.493 %	−2.969 %	0.5446 %	4.732 %	0.838	0.825
Date 2: Presentation of President's Fiscal Year 2025 Budget for the Department of Defence (March 11, 2024)							
CAAR [-1,1]	−1.058 %	6.042 %	−3.732 %	−1.310 %	0.168 %	0.471	0.462
CAAR [-1,5]	−1.998 %	10.358 %	−5.719 %	−0.748 %	2.627 %	0.373	0.362
CAAR [-1,10]	−0.651 %	14.137 %	−5.389 %	−0.008 %	5.379 %	0.824	0.802
CAAR [-5,5]	−1.401 %	11.206 %	−4.265 %	0.017 %	3.237 %	0.618	0.604
CAAR [0,2]	−1.501 %	4.889 %	−2.871 %	−0.948 %	0.377 %	0.306	0.290
CAAR [0,5]	−2.144 %	9.706 %	−4.125 %	−0.745 %	2.112 %	0.301	0.295
CAAR [0,10]	−0.797 %	13.397 %	−4.578 %	0.232 %	4.973 %	0.776	0.767
Date 3: D. Trump Campaign Promises to Create Space National Guard, Demands More NATO Spending (August 26, 2024).							
CAAR [-1,1]	−0.513 %	3.790 %	−1.992 %	−0.684 %	0.854 %	0.589	0.571
CAAR [-1,5]	−2.102 %	6.350 %	−4.384 %	−1.818 %	0.919 %	0.148	0.152
CAAR [-1,10]	−2.786 %	8.594 %	−5.838 %	−2.271 %	0.796 %	0.143	0.134
CAAR [-5,5]	−0.751 %	5.807 %	−3.827 %	−0.793 %	1.156 %	0.199	0.207
CAAR [0,2]	−1.018 %	4.894 %	−1.816 %	−0.389 %	0.984 %	0.284	0.271
CAAR [0,5]	−2.213 %	5.510 %	−4.808 %	−1.813 %	0.833 %	0.103	0.110
CAAR [0,10]	−2.896 %	7.999 %	−5.590 %	−1.998 %	0.281 %	0.111	0.120

This table shows the Cumulative Average Abnormal Returns (CAARs) of defence industry calculated using the five-factor model of Fama and French (2015), as well as the results of abnormal returns significance tests for three pre-election campaign dates. The three pre-election campaign dates are: (*i*) February 10, 2024 – date of D. Trump speech, which refers that the US should not protect a NATO country that is in default on its payments; (*ii*) March 11, 2024 – date of official presentation of President's Fiscal Year 2025 budget for the Department of Defence; and (*iii*) August 26, 2024 – date on which, during D. Trump's campaign, he promised to create the National Space Guard and made demands for increased defence spending from NATO countries. 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.

Table 8
CAARs and Tests for the Significance of Abnormal Returns After Elimination of Defence Firms with Confounding Effects Related With Earnings.

Variable	Mean	SD	25th perc.	Median	75th perc.	θ_1	τ_1
2024 US Presidential Election (November 5, 2024)							
Panel 1: MARKET MODEL (MM)							
CAAR [-1,1]	1.494 %	4.844 %	−1.684 %	1.150 %	4.212 %	0.094*	0.081*
CAAR [-1,5]	5.187 %	7.282 %	0.961 %	3.579 %	9.247 %	0.000***	0.000***
CAAR [-1,10]	4.217 %	11.953 %	−2.235 %	3.809 %	7.816 %	0.019**	0.021**
CAAR [-5,5]	3.820 %	9.321 %	−0.897 %	3.114 %	8.347 %	0.026**	0.029**
CAAR [0,2]	2.277 %	4.517 %	−0.390 %	1.774 %	5.651 %	0.014**	0.020**
CAAR [0,5]	5.618 %	7.280 %	1.192 %	3.831 %	9.554 %	0.000***	0.000***
CAAR [0,10]	4.648 %	12.024 %	−2.389 %	3.869 %	7.962 %	0.001***	0.001***
Panel 2: FIVE-FACTOR MODEL OF FAMA AND FRENCH (2015) (FF5)							
CAAR [-1,1]	1.406 %	5.017 %	−1.753 %	1.396 %	4.861 %	0.109	0.099*
CAAR [-1,5]	4.763 %	7.450 %	0.591 %	4.026 %	9.085 %	0.011**	0.010***
CAAR [-1,10]	3.152 %	11.476 %	−3.006 %	2.880 %	6.300 %	0.039**	0.037**
CAAR [-5,5]	3.353 %	8.992 %	−2.967 %	3.071 %	7.597 %	0.044**	0.047**
CAAR [0,2]	3.117 %	4.227 %	0.185 %	3.258 %	5.978 %	0.012**	0.015**
CAAR [0,5]	5.296 %	7.212 %	1.505 %	4.289 %	8.777 %	0.003***	0.005***
CAAR [0,10]	3.685 %	11.508 %	−3.051 %	2.571 %	7.521 %	0.055*	0.058*

This table shows the Cumulative Average Abnormal Returns (CAARs) of defence industry 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, after the elimination of 34 defence firms with confounding effects related with earnings news items five day window before and after the 2024 US presidential election. 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.

CRediT authorship contribution statement

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

administration, Investigation, Funding acquisition.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix

Appendix I. . Sample of Publicly listed defence firms

This table reports the list of defence firms analysed in the present study by country. For each one, the country where the firm's headquarters is located is presented.

Defence Firm	Country	Defence Firm	Country
1. FACC AG	Austria	36. Montana Aerospace AG	Switzerland
2. Danish Aerospace Company A/S	Denmark	37. Altinay Savunma	Turkey
3. AIRBUS SE	France	38. Aselsan Elektronik Sanayi ve Ticaret	
4. Dassault Aviation		39. Hat-San Gemi Insaa Bakim	
5. Exail Technologies		40. Onur Teknoloji	
6. FIGEAC AERO		41. SDT Uzay ve Savunma Teknolojileri	
7. LATECOERE		42. Avon Technologies PLC	UK
8. LISI S.A.		43. BAE SYSTEMS PLC	
9. SAFRAN		44. CHEMRING GROUP PLC	
10. SOGECLAIR		45. COHORT PLC ORD	
11. THALES		46. QINETIQ GROUP PLC	
12. HENSOLDT AG	Germany	47. ROLLS-ROYCE HOLDINGS PLC	
13. H&K AG		48. SENIOR PLC	
14. MTU Aero Engines AG		49. AAR Corp	US
15. OHB SE		50. AeroVironment	
16. RENK Group AG		51. Archer Aviation	
17. RHEINMETALL AG		52. Astronics Corporation	
18. AVIO S.p.A.	Italy	53. Axon Enterprise	
19. FINCANTIERI		54. Bryna Technologies	
20. LEONARDO		55. Butler National Corp	
21. OFFICINA STELLARE		56. BWX Technologies	
22. Theon International PLC	Netherlands	57. Cadre Holdings	
23. KONGSBERG GRUPPEN	Norway	58. Coda Octopus Group	
24. NORSK TITANIUM AS		59. Conrad Industries	
25. PHILLY SHIPYARD		60. CPI Aerostructures	
26. AAC Clyde Space AB	Sweden	61. Curtiss-Wright Corporation	
27. Aerowash AB		62. Ducommun Incorp	
28. Avtech Sweden AB		63. Eve Holdings	
29. CTT Systems AB		64. GE AEROSPACE	
30. GomSpace Group AB		65. General Dynamics	
31. Mildef Group AB		66. HEICO Corporation	
32. OXE Marine AB		67. Hexcel Corporation	
33. SAAB AB		68. Howmet Aerospace	
34. Scandinavian Astor Group AB		69. Huntington Ingalls	
35. W5 Solutions AB		70. Innovative Aerosystems	

Appendix II. . Sample of Publicly listed defence firms (cont.)

This table reports the list of defence firms analysed in the present study by country. For each one, the country where the firm's headquarters is located is presented.

Defence Firm	Country	Defence Firm	Country
71. Intuitive Machines	US	86. RTX Corporation	US
72. Kratos Defense & Security Solutions		87. Sky Harbour Group Corp	
73. L3Harris Technologies		88. Smith & Wesson Brands	
74. Loar Holdings		89. Spirit AeroSystems Holdings	
75. Lockheed Martin Corp		90. StandardAero	
76. Mercury Systems		91. Sturm, Ruger & Company	
77. Moog Inc.		92. Textron Inc.	
78. National Presto Industries		93. The Boeing Company	
79. Northrop Grumman Corp		94. TransDigm Group Incorporated	
80. Optex Systems Holdings		95. Triumph Group	
81. Outdoor Holding Company		96. V2X	
82. Park Aerospace Corp		97. Virgin Galactic Holdings	
83. Planet Labs PBC		98. VSE Corp	
84. Redwire Corp		99. Woodward	
85. Rocket Lab USA		100. XTI Aerospace	

Data availability

Data will be made available on request.

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