



Weapons and wealth: Market reaction to Europe's defense push

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ARTICLE INFO

JEL classification:

G14
H56
O38

Keywords:

Readiness 2030
Stock market
Defense and high-tech industry
Event study

ABSTRACT

This paper analyzes abnormal returns around the EU's *Readiness 2030* defense initiative. Defense stocks saw strong positive returns, especially pre-announcement, while high-tech firms showed weak or negative returns—indicating no spillover effect to the tech sector and underscoring the role of industry classification in market reactions.

1. Introduction

In recent years, Europe has undergone a profound geopolitical transformation, driven by escalating security concerns. Two pivotal factors have accelerated this shift: the gradual retrenchment of the United States from its traditional role as the guarantor of global security and the persistent instability stemming from the protracted Russia–Ukraine conflict. Against this backdrop, European nations have increasingly prioritized rearmament and strategic autonomy, marking a decisive departure from post-Cold War defense policies. Capitalizing on this momentum, the European Commission unveiled *Readiness 2030* on March 4, 2025—a landmark strategic initiative designed to bolster Europe's defense capabilities through enhanced military coordination, increased defense spending, and accelerated technological modernization. The announcement triggered immediate and widespread attention, as evidenced by the surge in global public interest in the weeks that followed (see Fig. 1). Beyond its geopolitical implications, the policy signaled a historic shift in Europe's strategic posture, resonating strongly with financial markets. Investors responded with pronounced enthusiasm, particularly in the defense sector, where stocks rallied on expectations of heightened government contracts and long-term industrial growth. This dual effect—capturing both public discourse and market dynamics—underscores the initiative's significance as a defining moment in Europe's evolving security architecture.

This paper investigates the short-term stock price response to the *ReArm Europe* announcement, with a focus on equities in the European defense sector. Political events, especially when they arise in

times of global uncertainty, often drive pronounced swings in asset prices. (Martins et al., 2023; Obi et al., 2023). Understanding these reactions is valuable not only for investors seeking to hedge or capitalize on geopolitical developments but also for policymakers and regulators, who may overlook the real-economy spillovers caused by such abrupt financial market adjustments. Although initial media and market attention surrounding the *Readiness 2030* initiative was later tempered by broader disruptions—such as the onset of a renewed U.S.-led trade conflict—the absence of a viable peace settlement in Ukraine has re-centered defense spending at the core of European strategic discourse.

To evaluate the financial market implications of the announcement, we conduct a single-date event study on European stock market data, complemented by a cross-sectional analysis to validate and extend the results. Consistent with expectations, our results reveal a strong and positive reaction in defense-related stocks, reflecting investor anticipation of increased government expenditure and subsidies.

Importantly, this study also considers the broader economic consequences of increased defense expenditure. While the immediate financial beneficiaries are often defense-sector firms, a sustained rise in military spending may divert resources—such as public funding, skilled labor, and private investment—away from other innovation-driven sectors. Prior research has documented potential crowding-out effects, where higher defense allocations negatively impact investment in civilian high-tech industries (see, among others, Barro and Redlick, 2011). However, this relationship is not universally negative. For example, Moretti et al. (2025), analyzing U.S. data, find

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World Interest in *ReArm Europe* (March-April 2025)

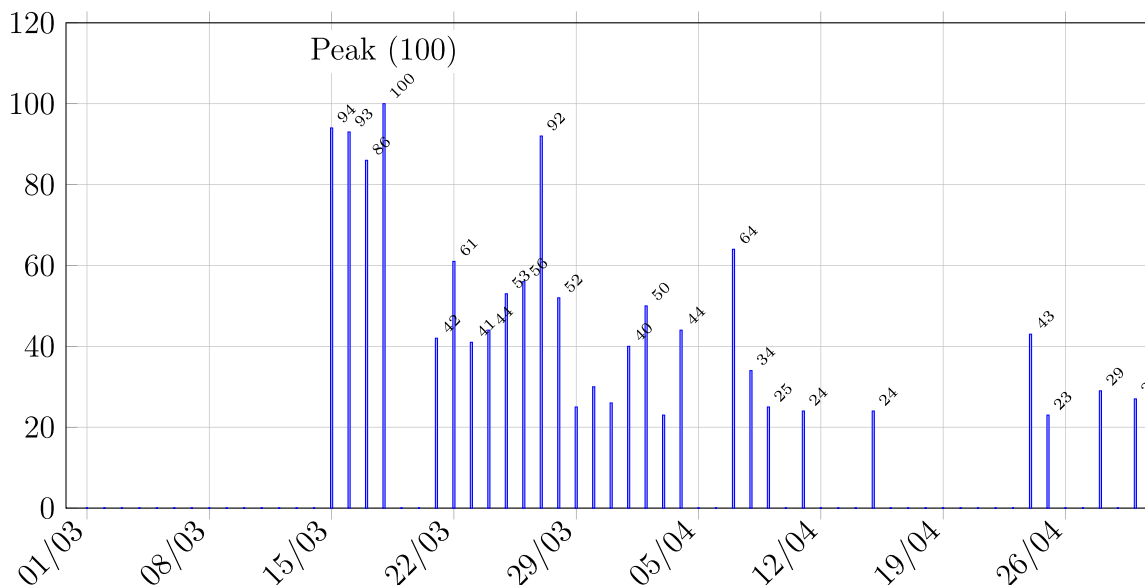


Fig. 1. This figure depicts the evolution of the World Google Search Intensity for the topic *ReArm Europe* from March to April 2025. The bar graph shows daily interest values, with significant spikes in mid-March followed by intermittent interest throughout April.

that increases in federal defense R&D spending can actually stimulate innovation in related technological domains. They show that regions with strong ties to the defense sector experience a measurable uptick in patenting activity in adjacent fields, suggesting that, under certain conditions, defense R&D can act as a catalyst for broader technological progress—particularly when spillovers to dual-use technologies are present. Another example is provided by Pallante et al. (2023).

Our empirical results, however, do not support this more optimistic view—at least in the short term and within the European context. We observe a distinct pattern of cumulative abnormal returns (CARs) for tech firms compared to defense firms following the *ReArm Europe* announcement. While defense stocks exhibit strong positive reactions, tech firms show muted or even negative responses. This divergence suggests that investors may perceive increased defense spending as a reallocation of public and private resources away from the civilian tech sector. Cross-sectional regressions reinforce this interpretation, confirming a statistically significant difference in market response across sectors.

The rest of the paper is structured as follows: Section 2 details the methodological framework and data sources. Section 3 discusses the key empirical results. Section 4 concludes.

2. Empirical strategy

2.1. Data

The sample of companies is constructed based on stocks listed in the STOXX All Europe 100 and STOXX Europe 600 indices, as of March 31st, 2025. Unless otherwise specified, all stock data is sourced from LSEG. The analysis detailed in Section 2.2 is performed on portfolios constructed from both these indices, to enhance the robustness of the findings. First, we collect price time series for all relevant stocks over the period from January 2nd, 2024 to April 30th, 2025. Second, we construct a panel containing additional information used to (i) classify stocks according to defense and high-tech criteria, to compute the corresponding CARs, and (ii) conduct the cross-section analysis.

Stocks are classified into the following categories. On the one hand, we construct defense and non-defense portfolios. This classification relies on the “Top 100 Arms-producing and Military Services

Companies” report, published annually by the Stockholm International Peace Research Institute (SIPRI). This report provides an overview of the global defense industry, its dynamics, and its connections to shifting geopolitical tensions. It also provides a list of industry’s top players worldwide, ranked by arms revenues, defined as revenues generated directly from sales of military goods and services to military customers (Scarazzato et al., 2024). We build a “SIPRI flag”, according to which, if a company appears in this list, its stock is included in the defense portfolio, otherwise it is assigned to the non-defense one. According to this criterion, we identify 5 and 13 stocks for inclusion in the defense portfolios, based on the STOXX All Europe 100 and STOXX Europe 600 indices, respectively. The issuing companies are based in 10 European countries,¹ along with some trans-European entities. On the other hand, we build a “High-tech flag” to distinguish between high-tech and non-high-tech portfolios. This classification follows the criterion proposed by Eurostat, which categorizes manufacturing industries into (i) high, (ii) medium-high, (iii) medium-low and (iv) low technology, based on their 3-digits NACE Rev 1.1 code. For the sake of representativeness, we include in “High-tech” portfolios those stocks belonging to the first two groups. According to this criterion, we classify 12 and 49 stocks into high-tech portfolios from STOXX Europe 100 and STOXX Europe 600 indices, respectively. Table 1 reports descriptive statistics for the returns of our newly constructed portfolios.

Finally, firm-level dataset is complemented with additional information, needed to estimate the CAPM and the following expected (normal) excess returns (see Eq. (2)). Specifically, we include the European risk-free rate and market excess return, provided by Fama&French.

2.2. Methodologies

CARs. We estimate Cumulative Abnormal Returns (CARs) around *Readiness 2030* announcement, which took place on March 4th, 2025, using a single-date event study methodology. To compute the CARs, Abnormal Returns (ARs) must first be estimated. The AR of stock or portfolio i at time t is defined as:

$$AR_{i,t} = R_{i,t} - NR_{i,t}, \tag{1}$$

¹ Czechia, France, Germany, Italy, Norway, Poland, Spain, Sweden, Ukraine, and United Kingdom.

Table 1
Descriptive statistics of portfolio returns, based on different classification criteria.

Criterion	#Firms	Mkt.Cap.	Mean	Std.Dev.	Skewness	Kurtosis
<i>STOXX All Europe 100</i>						
Defense	5	0.3888	0.0005	0.0153	-0.2819	5.9639
Non-defense	95	12.6562	0.0005	0.0149	-0.4747	14.9447
High-tech	12	1.4002	0.0000	0.0161	-0.4401	13.3086
Non-high-tech	88	11.6449	0.0005	0.0148	-0.4657	14.6148
<i>STOXX Europe 600</i>						
Defense	13	0.7514	0.0005	0.0184	-0.4123	7.8925
Non-defense	582	27.2231	0.0004	0.0172	0.1481	22.9353
High-tech	49	2.7224	0.0003	0.0181	-0.2218	13.8178
Non-high-tech	546	25.252	0.0004	0.0172	0.1712	23.4694

Notes: The period over which these statistics are calculated aligns with that used for CAPM estimation, spanning from March 7th, 2024, to January 21st, 2025, corresponding to -250 to -30 trading days before the event date. Market capitalization is expressed in trillion euros.

where $R_{i,t}$ is the observed excess return and $NR_{i,t}$ is the expected (normal) excess return. The latter is defined as:

$$NR_{i,t} = \hat{\alpha}_i + \hat{\beta}_i R_{m,t}, \tag{2}$$

where $\hat{\alpha}_i$ and $\hat{\beta}_i$ are the intercept and sensitivity of stock or portfolio i to market-portfolio excess return $R_{m,t}$, respectively, estimated through the CAPM.² Finally, given a timeframe of interest beginning t_s days before, and ending t_e days after the event date t_0 , CARs are defined as the cumulate ARs from $t_0 - t_s$ to the date $t \in [t_0 - t_s, t_0 + t_e]$:

$$CAR_{i,t} = \sum_t AR_{i,t}. \tag{3}$$

In line with relevant literature on CARs (Borghesi et al., 2022; Guastella et al., 2022), we apply this methodology estimating the CAPM over the $[t_0 - 250, t_0 - 30]$ timeframe, and then estimate CARs over a window spanning 10 before to 10 days after event date.

Cross-sectional regression. We examine the relationship between company characteristics and CARs around a specific event, with particular attention to environmental metrics and defense industry classification. In particular, we regress CARs at three time times: pre-event (10 days before), at event date, and post-event (10 days after). The regression model estimating these relationships is specified as:

$$CAR_i = \beta_0 + \beta_1 CI_i + \beta_2 MktCap_i + \beta_3 Leverage_i + \beta_4 ROA_i + \beta_5 ROA_i^2 + \beta_6 BTM_i + \beta_7 SIPRI_i + \beta_8 TECH_i + \sum_j \gamma_j NACE_{i,j} + \epsilon_i, \tag{4}$$

where $SIPRI_i$ is the flag indicating companies identified by the SIPRI as defense-related, $TECH_i$ identifies high-tech companies, while $NACE_{i,j}$ accounts for industry-related fixed effects. In a similar fashion of Ramelli et al. (2021), we then include a set of standard controls: (i) market value of equity, calculated as the share price multiplied by the number of shares outstanding on the same day (MktCap), (ii) market leverage, defined as the ratio of equity to total assets (Leverage), (iii) profitability, measured by Return on Assets (ROA),³ and (iv) book-to-market value, defined as the book value of equity divided by its market value (BTM). In addition we consider a measure of carbon intensity (CI), defined as emissions over revenues.⁴

² We rely only on the CAPM to estimate expected returns, in line with standard practice in short-horizon event studies (e.g., MacKinlay, 1997; Kothari and Warner, 2007; Kurek, 2020). While multi-factor models may better explain returns in general, they can introduce unnecessary estimation noise in the context of abnormal return calculations. The CAPM allows indeed a balance between model simplicity and explanatory power.

³ Following systematic testing for nonlinear relationships via ANOVA model comparisons, we incorporate a quadratic ROA term in our final specification.

Table 2
Estimation results of Eq. (4), based on CARs measured 10 days before the event date, on the event date, and 10 days after, using the STOXX Europe 600 index.

	Dependent variable		
	CAR(-10)	CAR(0)	CAR(+10)
Carbon Intensity	0.00004*** (0.00001)	0.00002** (0.00001)	-0.00001*** (0.00000)
Market capitalization	0.00000 (0.00003)	0.00005* (0.00002)	0.00002*** (0.00001)
Leverage	-0.15200*** (0.02400)	-0.09000*** (0.02200)	-0.00300 (0.00500)
Return on asset	0.00400*** (0.00100)	0.00300*** (0.00100)	0.00030 (0.00020)
Return on asset ²	-0.00010** (0.00003)	-0.00005** (0.00002)	-0.00000 (0.00000)
Book-to-market	0.00100*** (0.00010)	0.00040*** (0.00010)	0.00002 (0.00002)
SIPRI flag	0.15700** (0.07100)	0.14200** (0.06700)	0.01400*** (0.00500)
High-tech flag	-0.02200 (0.02100)	-0.01900 (0.01700)	-0.01000*** (0.00300)
Observations	446	446	446
Adjusted R ²	0.222	0.158	0.114

* Significance level is denoted as 10%.

** Significance level is denoted as 5%.

*** Significance level is denoted as 1%.

Robust standard errors (HCl) are shown in parentheses. NACE sector fixed effects included (not reported).

3. Empirical findings

3.1. Industry portfolio-level analysis

The CARs, for defense, non-defense, high-tech, and non-high-tech portfolios, based on STOXX All Europe 100 and STOXX Europe 600 indices, are presented in Fig. 2.

The *Readiness 2030* initiative generated a remarkable divergence in market responses across sectors. Defense portfolios exhibited a strong positive reaction, with CARs rising steadily from day -4 and exceeding 8% by day +10 (see blue solid line). This surge suggests investors interpreted the announcement as a significant tailwind for defense firms, likely anticipating increased military spending. Notably, defense CARs began to recover a few days prior to the event, hinting at an anticipation effect. In contrast, non-defense (blue dashed line), high-tech (brown solid line), and non-high-tech (brown dashed line) portfolios followed a similar but muted pattern: after a temporary rebound around the event day, CARs remained flat or negative through the post-event window. The growing gap between defense and all other portfolios—visible immediately after the proposal and widening over time—underscores the sector-specific nature of investor optimism, concentrated solely in the defense industry.

3.2. Firm-level analysis

We execute this analysis for CARs at -10, 0 a +10 days relative to the event, and results are reported in Table 2. We limit the analysis to the sample based on STOXX Europe 600 index, as the elimination of missing data reduced the statistical power of the STOXX All Europe 100 index to insufficient levels. Moreover, it was not possible to use sectoral fixed effects with the smaller sample. The SIPRI flag shows a strongly positive and statistically significant relationship with CARs across all

⁴ LSEG field codes used to retrieve data are the following: TR.CompanyMarketCapitalization, TR.F.TotShHoldEq, TR.F.TotAssets, TR.F.ReturnAvgTotAssetsPctTTM, TR.F.BookValuePctMktCap, TR.AnalyticEstimatedCO2Total, and TR.F.TotRevenue.

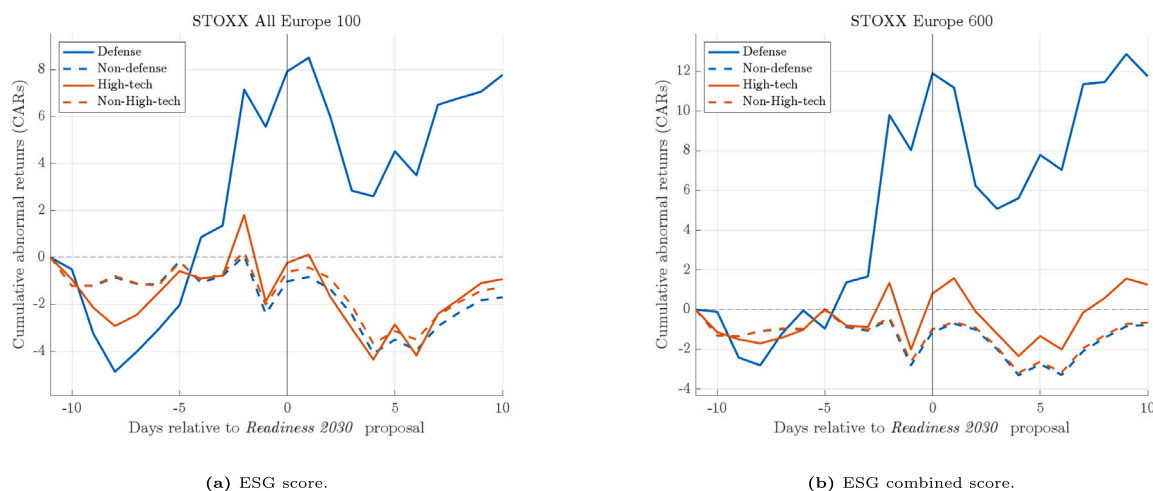


Fig. 2. CARs around *Readiness 2030* announcement.

Notes: This figure illustrates the dynamics of CARs between 10 days before and after *Readiness 2030* announcement on March, 4th, 2025, for (i) defense (blue solid line), (ii) non-defense (blue dashed line) and (iii) high-tech (brown solid line) vs. non-high-tech (brown dashed line) portfolios. Left (right) panel depicts CARs of portfolios based on STOXX All Europe 100 (STOXX Europe 600) index, respectively.

time windows examined. Companies flagged by SIPRI experienced substantially higher CARs of approximately 15.7% in the pre-event window (10 days before), 14.2% at the event date, and 1.4% in the post-event window (10 days after). In contrast to the defense sector premium, the high-tech flagged companies experienced significant negative CARs, but only in the post-event window (10 days after). Other control variables show varying relationships across the time windows, with leverage and book-to-market ratio exhibiting significant effects primarily in the pre-event and event periods, while market capitalization becomes increasingly important in later periods. The models explain between 14.8% and 25.2% of the variation in the cross-section of CARs, with the strongest explanatory power in the pre-event window, suggesting that market anticipation of the event captured more systematic variation than post-event reactions.

4. Conclusion

In this paper, we study the short-term reaction of major European stocks to the announcement of the *Readiness 2030* initiative—formerly known as *ReArm Europe*—made by the European Commission on March 4, 2025. Using a single-date event study methodology, we analyze the dynamics of CARs across firms, focusing on differences between those classified within the defense industry and those outside it, to uncover potential asymmetries in market response. We also examine CARs of high-tech versus non-high-tech portfolios to explore possible spillover effects. Lastly, we conduct a cross-sectional firm-level analysis to identify key drivers of abnormal returns following the announcement.

Our findings highlight a sharp outperformance of defense portfolios compared to non-defense ones around the *Readiness 2030* announcement. This differential becomes evident several days before the event date, suggesting that investors anticipated the policy move and reallocated capital toward stocks most likely to benefit. In contrast, the CARs dynamics of high-tech versus non-high-tech portfolios are very similar—and closely track those of non-defense portfolios—indicating that any potential spillover from defense to high-tech stocks is not detectable, at least in the short run. This reinforces the conclusion that the main driver of positive CARs is the inclusion of stocks issued by defense companies, as identified by their presence in the Stockholm International Peace Research Institute's (SIPRI) “Top 100 Arms-producing and Military Services Companies” list. These results are robust across both portfolio construction universes—the STOXX All Europe 100 and STOXX Europe 600 indices—and are further supported by our cross-sectional analysis, which confirms that excess returns are strongly

associated with being on the SIPRI list, particularly in the days leading up to the announcement.

This study contributes to the growing literature on the financial effects of political and security-related announcements, with a focus on the defense and high-tech sectors in Europe. By highlighting the role of investor anticipation and the relevance of firm classification, our findings underscore the importance of clear sectoral definitions when assessing market responses to geopolitical events. Future research will extend this analysis to the U.S. market and explore potential cross-Atlantic spillovers—particularly whether European defense announcements impact United States high-tech stocks, and *viceversa*.

Data availability

Data will be made available on request.

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