The Rise of the New European Military Industrial Complex under Trump

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Abstract

Politics and elections have always affected business sectors in different ways. Sometimes the election of some president can mean prosperity for some business sectors or grave decline for others. In 2016, the American people made the choice to elect Donald J. Trump as their next president. Donald Trump is an exceptional character with many controversial campaign promises, among them was the promise of making Europe defend itself. The purpose of this thesis is to examine the effect of this promise on a related industry, the European defence industry. More specifically, stock returns of listed European defence companies will be studied during a period of 2 days after Donald Trump's election. In this study, substantial abnormal returns ranging from 2% to 8 % were observed following Trump's election on either the 9th or 10th of October. It was also discovered that the abnormal returns are statistically significant with at least 95% confidence level. However, for most of the companies within the sample, the abnormal returns were significant for even bigger confidence intervals. The findings establish support for the hypothesis that investors expected that a natural reaction by the European nations to Trumps election will be to increase their military spending. This expected increase in turn would mean more business and growth for European defence companies and naturally, the stock market efficiently translates this into higher stock returns.

Introduction

There exists no solid treaty, alliance or a well-defined policy regarding how Europe can autonomously defend itself. Efforts in building such coordinated strategies have been futile and the United States still stands as the continents guardian. NATO for example is an alliance between most European states but it is however strictly military in nature and also includes and depends on several none European states. The EU is a strong organisation bonding most European countries but is however dominantly political and economical in nature¹².

The United States' unprecedented military resources and its dedication in protecting Europe have channelled European national priorities away from defence following the fall of the Soviet Union and the weakening of Russia. Indeed, only four of the 27 members of the European Union spend more than 2 percent of their GDP on defence and the total defence budget of all the 27 members has been shrinking for 6 years in a row to an overall EU average of just 1.4 percent³.

The election of Trump can be believed to have changed the prioritising scheme of the European nations dramatically. The new presidents promise, or more adequately put, threat about leaving NATO and not defending Europe has made European defence ministers increasingly worried. Europe does not have the proper military strength to stop a foreign invasion by a superpower without external assistance. If Trump does fulfil his promises, the majority of European countries have no choice but to start a military expansion which should in theory mean a new European industrial military complex. This in turn would mean increased revenue, growth and thus higher return on equity for listed European defence companies.

¹ Official website of NATO <u>http://www.nato.int/nato-welcome/index.html</u> (2017-04-28)

² Official website of the European Union <u>https://europa.eu/european-union/index_en</u> (2017-04-05)

³Sofia Besch, Center for European Reform, EU defence, Brexit and Trump The Good, the Bad and the Ugly. <u>https://www.cer.org.uk/sites/default/files/pb_defence_14dec16.pdf (2017-04-05)</u>

Background

Defending Europe since 1914

During both world wars, the United States channelled vast resources to Europe in an attempt to defeat the central and axis powers. However, this strategy was ineffective and the United States had to take an active and leading role with a participation that was decisive in winning both wars. After the end of World War 2, the Soviet Union hade encircled Berlin and had at the time accumulated enormous military resources.

After World War 2, the western world knew that the Soviets could with ease continue their advance and engulf the entire European continent. This is since the Americans and the British troops deployed were the only remarkable force at that time and even they were unmatched by the newly created Soviet war machine. As a result, the United States and major European states converged and established the North Atlantic Treaty Organization (NATO) which dictates in its article 5 that any attack on a member state is considered an attack on all other, including the United States⁴.

Furthermore, the United States' knew that a presence in the region was critical to Europe's defence since an attack by the Soviet will be swift. Mobilising across the Atlantic would take weeks if not months and by that time, most of Europe will presumably be under Soviet control. The solution was to establish large military bases and deploy troops on rotations basis in order to have a substantial force in the region at all time⁵. The collapse of the Soviet Union and the subsequent fragmentation of its military might meant however, that fewer resources were required to secure Europe. This lightened defence burden was unfortunately short lived after the recovery Russia's economy and its ambition to gain lost Soviet territory primarily from the edges of the European continent⁶.

NATO and the European free-ride

During the last couple of years, some events have affected the European defence market positively. First, the terror attacks in central Europe have pushed EU leaders to invest more in counter-terrorism programs and increasing trans-member cooperation⁷. Second, Brexit has paved the way for many

⁴Official website of NATO

http://nato.int/nato_static_fl2014/assets/pdf/pdf_publications/20120412_ShortHistory_en.pdf (2017-04-28)

⁵ Luke Coffey, Keeping America Safe: Why U.S. Bases in Europe Remain Vital, The Heritage,

http://www.heritage.org/defense/report/keeping-america-safe-why-us-bases-europe-remain-vital (2017-5-13) ⁶ Sophie Pinkham, The Guardian, How annexing Crimea allowed Putin to claim he had made Russia great again <u>https://www.theguardian.com/commentisfree/2017/mar/22/annexing-crimea-putin-make-russia-great-again</u> (2017-05-10)

⁷ Sofia Besch, Center for European Reform, EU defence, Brexit and Trump The Good, the Bad and the Ugly. <u>https://www.cer.org.uk/sites/default/files/pb_defence_14dec16.pdf (2017-04-05)</u>

European defence initiatives that have been vetoed for years by the island nation who sees the increased cooperation as a threat to its military autonomy and an undermining of the NATO alliance. Third, and most importantly for this thesis, is the election of the 45th president Donald J. Trump and his campaign promises concerning the heavy burden that the United States carries in defending Europe and the potential unwillingness to do so if the continent does not take its share of the load. Trump bluntly said in an interview with the New York Times in 2016 that *"if we cannot be properly reimbursed for the tremendous cost of our military protecting other countries…if we cannot make a deal…then yes, I would be absolutely prepared to tell those countries, congratulations, you will be defending yourself."*⁸

President Trump has also mentioned on several occasions his desire to "look at" leaving NATO since it is costing the US, according to him, "a fortune"⁹.

Why protecting Europe costs a "fortune"

The United States spends more money on defence than any other country in the world. It has military bases in almost every country and with 10 aircraft carriers deployed in the world oceans, it can strike almost anywhere in the world with a moment's notice¹⁰.

In numbers, the United States spends approximately 600 billion US dollars while the rest of the world's expenditure combines to 1655 billion. The United States' stake is thus 36% of the entire world's combined defence budgets. This defence budget however varies from year to year depending on world events. In 2010 and 2011 for example the United States spent 721 and 710 billion respectively. This was due to the superpower being involved in two different wars simultaneously, in Afghanistan and Iraq as well as enforcing a no-fly zone over Libya¹¹¹².

	1990s				2000s				2010s											
	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Defense Budget (Billions)	266	270	271	292	304	335	362	456	491	506	556	625	696	698	721	717	681	610	614	637
Total Budget (Trillions)	1.58	1.64	1.69	1.78	1.82	1.96	2.09	2.27	2.41	2.58	2.78	2.86	3.32	4.08	3.48	3.51	3.58	3.48	3.64	3.97
Defense Budget %	16.8	16.5	16.0	16.4	16.7	17.1	17.3	20.1	20.4	19.6	20.0	21.9	20.9	17.1	20.7	20.4	19.1	17.5	16.8	16.0
Defense Spending % Change	-0.1	+1.6	+0.2	+7.8	+4.0	+10.1	+8.2	+26.0	+7.6	+3.1	+10.0	+12.5	+11.3	+0.2	+3.4	-0.6	-5.0	-10.5	+0.6	+3.8

Picture 1. The Annual military spending by the U.S. from -96 to -15

⁸The New York Times, <u>https://www.nytimes.com/2016/07/22/us/politics/donald-trump-foreign-policy-interview.html</u> (2017-05-01)

⁹ Carlos Barria, A Guide To Trump's Past Comments About NATO, CBS News, <u>http://www.cbsnews.com/news/trump-nato-past-comments/</u> (2017-05-12)

¹⁰ US Military Strength Index, The Heritage, <u>http://index.heritage.org/military/2016/assessments/us-military-power/us-navy/</u> (2017-05-11)

¹¹ Dina Walker, Trends In U.S. Military Spending, Council on Foreign Relations, <u>http://www.cfr.org/defense-budget/trends-us-military-spending/p28855</u> (2017-05-10)

¹² The Free Encyclopaedia, <u>https://en.wikipedia.org/wiki/Military_budget_of_the_United_States</u> (2017-05-05)

Looking at the defence budget as a percentage of GDP gives however, a different story. The United State spent 3.5% of its GDP on defence putting it in fourth place after Saudi Arabia, Israel and Russia. This enormous expenditure has been under critique for a long time as many propose that instead of protecting the world, the United State should focus on downsizing its forces to just protect its borders. This way, resources can be channelled to projects inside the United States such as infrastructure or the much-criticized health care system¹³.

Trump on taking responsibility and the European reaction

Trump made the above point very clear on several occasions and mentioned that the United State is bearing a disproportionate burden in defending the free world and that other countries better share some of the responsibility or face the risk of losing the most powerful ally in the world. On a recent occasion during a joint press conference with the Italian prime minister Paolo Gentiloni, Trump received a question concerning what he thinks about the under-spending by European countries on defence. Trump praised the question and responded that the question was "very good" and that he was "eager to hear" what the Italian prime minister had to say. This stance is another action taken by Trump to cement his threats about not supporting countries in Europe who do not take an adequate share of responsibility in protecting the continent¹⁴.

Nothing has moved EU leaders faster into building a stronger an autonomous European defence than the surprising election of President Trump. Some of the initiatives that have been presented are purely diplomatically and concern improving coordination and establishing a central European operations command centre. However, the most important point made by defence ministers was that the EU has to drastically increase its defence spending in order to achieve military autonomy. The increase in the defence spending should also target European defence contractors to establish strategic technological advantages and minimize the dependence on third party countries outside the EU. In other words, not only must EU members invest more in defence technology but they must also build a sovereign European military industrial complex that can ensure the industrial capabilities needed for a war. In theory, the European defence sector should see one of the biggest growth since recovering from the 2007 financial crises. If the EU is truly committed in establishing an autonomous European defence force, then the prospects of defence companies in Europe are looking

¹³ Robert Johnson, What The Money Spent In Iraq And Afghanistan Could Have Bought At Home In America, Business Insider <u>http://www.businessinsider.com/money-spent-in-afghanistan-could-buy-at-home-2011-8?r=US&IR=T&IR=T</u> (2017-04-24)

http://www.businessinsider.com/money-spent-in-afghanistan-could-buy-at-home-2011-8?r=US&IR=T&IR=T (2018-04-25)

¹⁴Toluse Olorunnipa and Jennifer Jacobs, Bloomberg, "Italy's Gentiloni vows to meet Trump nato spending demand slowly"

https://www.bloomberg.com/politics/articles/2017-04-20/italy-s-gentiloni-vows-to-meet-Trump-nato-spendingdemand-slowly (2017-05-10)

more prosperous than ever ¹⁵. This is true of course if we consider the EU to be representative for the whole of continental Europe.

Investors point of view

Investors follow world's events constantly to capitalise on events that lead to the depreciation or the appreciation of certain assets. 9/11 was such an event which many say pushed investors' capital into the defence sector anticipating an increased spending by the government in preparation for coming conflicts.

"Some sectors, however, prospered as a result of the attacks. Certain technology companies as well as defence and weaponry contractors saw prices for their shares increase substantially, anticipating a boost in government business as the country prepared for the long war on terror."

- Marc Davis | September 9, 2011, Investopedia

To prove if the same applies to Trump's election, a study regarding the returns of major European defence stocks and its correlation with the event of Trump's election will be examined. More precisely, the paper will examine if there were abnormal returns during an event window shortly after Trump was elected. If investors had predicted that European nations would increase military spending in response to his election, abnormal returns should be observable in the data and a chance of causality could be present. However, if there is no evidence of substantial abnormal returns, a conclusion will be drawn that investors did not believe that Trump's threats are viable and that the United States will continue to protect Europe.

The shock of Trump getting elected should, as with 9/11 and in theory, result in an increase in military spending by NATO and other European nations. This in turn translates to more orders and increased business volumes for the relevant companies. An increase in business means naturally an increase in incremental cash flows which manifests itself in increased stock returns.

If investors thus believe that the action of increasing the military budget by European leaders will indeed occur, the prices of the stocks affected by this action will adjust and their prices will rise. This is done of course by investors at the market who will start to trade the stocks to prices that match their beliefs on the effects of the event on the industry's future cash flows.

¹⁵ Sofia Besch, Center for European Reform, EU defence, Brexit and Trump The Good, the Bad and the Ugly. <u>https://www.cer.org.uk/sites/default/files/pb_defence_14dec16.pdf (2017-04-05)</u>

Literature review

Literature on the topic is scarce and hard to come by since most reports are presumably classified due to their sensitive nature. Indeed, it's logical to not make public of reports that show the level of strength of European defence and what different policies are under consideration regarding Europe's defence. There is however a report made by Sofia Besch on December 2016 for the Center of European Reform or CER that explains the topic in a satisfactory manner. Even she has resorted to merely using statements made by European leaders promising a strong European military as a strong indication of coming changes, since on paper few measures have been taken.

It seems that never before had Europe been considering prompting its military capabilities until late 2016 after the American presidential election. Thus, literature on this very current topic, for example this paper, is still being produced. Moreover, there are few examples where statements or actions made by a nation's leader prompted increased military spending. The best examples are the world wars where England and the United States started preparing for war right after the fall of France and the perceived threat from Saddam Hussein by Saudi Arabia after the invasion of Kuwait which lead to increased military spending and permanent United States' military presence in the Arabian Gulf. Research on these events is not only scarce but also irrelevant to this paper which deals with several major developed countries military spending and not just one distinct nation.

Even though there are large volumes of research considering stock returns or profits of industries affected by some event, none has been made on defence. This paper therefore seeks to fill this vacuum on the effects of a certain event on defence companies, where the event in question is highly related to the companies' business.

Event study

An event study is a very useful tool to both capture and assess the impact of events on a wide range of security prices, trading activity and trading volumes. Furthermore, ESA (Event Study Approach) allows for a better understanding of how the information flows to the market and how and to what extent market participants interpret and act upon the information. The information flow is defined as any form of news that directly or indirectly affects a company or the industry it is active in. Since the world has become increasingly globalized and connected, for many international companies, a lot of news falls in the category of information flow. Among these are for example: a coup near or in the country where a company operates, dividend announcement, stock splits, rates decided by a central bank among many¹⁶.

¹⁶ Event Studies for Financial Research: A Comprehensive Guide", by Doron Kliger and Gregory Gurevich 2014

Background of Study

The DCF model and the three assumptions hypothesis

The study itself is generally very straight forward and intuitive. "Event Studies for Financial Research: A Comprehensive Guide" written by Doron Kliger and Gregory Gurevich in 2014 is a modern, extensive and very useful book that largely covers the topic. The intuition behind why the market reacts to news is very straight forward and the answer can be found in a widely used method to value enterprises. The Discounted Cash Flow method (DCF) first used in ancient Egypt is still used today to value companies differing in size, industry and growth. The basic idea is that the value of an enterprise is the sum of all future cash-flows with each cash flow discounted with an appropriate discounting factor reflecting the riskiness of that cash flow.

Discounted Cash Flow =
$$\frac{CF_1}{(1+dr)^1} + \frac{CF_2}{(1+dr)^2} + \dots + \frac{CF_n}{(1+dr)^n}$$
 Equ. 1

Where:

 CF_n = Cash flow at period n

dr= discount rate

Based on equation 1 above, it is clear that the only way the value of a company and thus the value of its stock can change is a change in either the cash flows or the applied discount factor. Discount factors are static by character and seldom change quickly. Expected future cash flows on the other hand are volatile and are constantly revaluated and adjusted based on new information and circumstances that directly or indirectly affects the size of the cash flow and the probability that it will be realized.

In order to conduct an event study and correctly asses the effects of an event on a security price, three main assumptions must be made: The model for normal price in the absence of the event (the counterfactual) is well specified, the event in question was not anticipated and thus not already priced in and lastly, the assumption that the market is efficient and that new information translates into price changes immediately must also be made¹⁷.

The first assumption is with no doubt the most difficult one and cannot be made with absolute certainty. The difficulty lies in observing the prices of the securities in interest in the absence of the event, the so called counterfactual. In this case, the counterfactual is Hillary Clinton winning the election instead of Donald Trump, and since that did not happen, it is impossible to observe the

¹⁷ Statistical methods in Corporate finance, Lecture 4: Event Studies By: Laurent Bach. (2017-04-17)

prices of a security under this counterfactual event and make a comparison to what instead happened. Therefore, these hypothetical prices that we never get to observe must be estimated.

The question that needs to be answered is thus: how would the prices of the securities in interest react to a Clinton win? And it can be answered in very different ways based on an array of assumptions. For example, it can be assumed that the prices reacted according to the CAPM and simply showed a return reflecting the return of the market portfolio and the riskiness (the beta) of the securities. However, it can also be the case that investors anticipated that Hillary Clinton will harden the tone against Russia and other adversaries of the United States, increasing the risk of a direct confrontation between Europe as allies of the United States with Russia and consequently motivating increases in defence spending benefiting European defence companies¹⁸¹⁹.

After closely weighing in different hypothesis, examining each candidate, their proposed policies in the international arena and studying professional pre-election analysis on how the market would probably react to the win of each, it was decided to make the assumption that the security prices would show normal returns according to CAPM. There are two bases for this decision: Hillary's strong stance with Europe and unchanged attitude towards NATO and her profile as a business-as-usual president who will more or less adhere to the Obama doctrine resulting in a continuation of his foreign policy²⁰²¹.

The second crucial assumption, that the event was not anticipated and thus the outcome is not already priced in can be more confidently assumed due to the nature of the election. A macro-event such an election in true western democratic countries is heavily scrutinized and any manipulation in the results is non-existent. This translates into an inability to predetermine the outcome and thus gain any exclusive information that can be leaked. In other words, with extremely few exceptions, the media coverage during election night together with tight supervision made the information of Donald

 ¹⁸ "Spencer Ackerman, The Guardian, "Why Clinton's plans for no-fly zones in Syria could provoke US-Russia conflict" <u>https://www.theguardian.com/world/2016/oct/25/hillary-clinton-syria-no-fly-zones-russia-us-war</u> (2017-04-13)
¹⁹ David E. Sanger, NYT, "The Hawk on Russia Policy? Hillary Clinton, Not Donald Trump" <u>https://www.nytimes.com/2016/10/21/us/hillary-clinton-donald-Trump-putin-russia.html? r=0</u> (2017-04-19)

²⁰ Ky Trang Ho, Forbes, "Trump Vs. Clinton: How Will The Stock Market React To The Election?" <u>https://www.forbes.com/sites/trangho/2016/11/01/Trump-vs-clinton-how-will-the-stock-market-react-to-the-election/#7ada4fb2d6ee</u> (2017-04-16)

²¹ Damian Paletta, "Where They Stand on Foreign Policy Issues", WSJ <u>http://graphics.wsj.com/elections/2016/donald-</u> <u>Trump-hillary-clinton-on-foreign-policy/</u> (2017-04-09) Trump's victory and imminent presidency available to everyone at the same time, meaning that the No Anticipation Assumption (NAA) is valid²²²³.

A factor that further cements this assumption is the timing of the election. The winner was announced in the early morning of the 9th of November according to European time, meaning that all European stock exchanges were closed at the time. Consequently, the only way for anyone to trade based on the announcement is through after-hours trading which sees very small volumes. Besides, since we are mainly looking at the adjusted closing prices of securities, any after-hours trading will not affect our study.

The third and final assumption is the efficient market hypothesis which suggests that in efficient markets, the prices of a security almost instantly adjusts to the arrival of new information. Consequently, the price of a security reflects all available information at a given moment. The theory itself have been divided into three versions: weak, semi-strong and strong form, the weak form is when markets are weakly efficient and the current security prices reflect old information imbedded in earlier prices, the strong form on the other hand states that the market is strongly efficient and that all information regardless of confidentiality is reflected in the price of a security. In today's modern financial markets, one can with few reservations assume that prominent form of EMH is the strong or at least semi-strong version.

Data

Definition

A defence firm is defined as:

"A contractor concerned with the development and manufacture of systems of defense"

Defence companies are active within the arms industry or defence industry, which is a global industry with the top 100 companies totalling 370 billion in revenues during 2015²⁴. The fact that almost every nation on earth has a either an army, navy or air force, together with military expenditures being relatively stable throughout the years results in the defence industry enjoying stable revenues.

²² Alan M. Dershowitz, "Why it's impossible to predict this election", <u>https://www.bostonglobe.com/opinion/2016/09/13/why-impossible-predict-this-</u> <u>election/Y7B4N39FqasHzuiO81sWEO/story.html</u> (2017-04-05)

 ²³ Maxwell Tani, Business Insider, "Donald Trump shocks world, wins presidential election in biggest upset in political history", http://nordic.businessinsider.com/donald-Trump-wins-election-results-2016-11?r=US&IR=T (2017-04-07)
²⁴ Harri Thomas, SIPRI.org, Global arms industry: USA remains dominant despite decline; sales rise in Western Europe and Russia, says SIPRI https://www.sipri.org/media/press-release/2016/global-arms-industry-usa-remains-dominant (2017-05-2)

The definition however of a defence company is not clear cut and as is the case for any industry, there a no clear boundaries where a certain company can be placed within them. As is the nature of many modern enterprises, defence companies diversify their operations to include anything from civilian aerospace to advanced electronics. The well-known electronic manufacturer Samsung for example has a department the produces advances weapon technologies. Furthermore, the American company Boing, most famous for its civilian 737, 747 and 707 airplanes among many, is in fact one of biggest defence companies in the United States²⁵.

A reasonable, objective, and robust method to define a defence company is by using one of the many different industry classifications such as: ISIC, NAICS, SIC, ICB among many. These classifications are a type of economic taxonomy that subdivides companies in different industrial sectors based on for example type of product. However, immediate problems arise when attempting to use some of these classifications. First of all, there is no global classification covering all listed companies, there are different organizations behind different classification, covering different companies geographically and differing in methodology. Second of all, the sub-division often stops short of classifying defence company as active in the "aerospace and defence industry" meaning that both a defence company and a company developing space technology share the same classification. Lastly, several listed companies with a small market capitalization are not classified at all²⁶.

A classification however that showed promise is the relatively newly launched ICB, industry classification benchmark sponsored by FTSE. ICB utilizes a system of ten industries, divided into 19 super sectors which are further divided into 41 sectors and then 114 subsectors, one of them "Defence" with ICB code 2717. Although very useful it too has it downsides as some defence companies are not included and some genuine defence companies falling in the subsector "Aerospace" instead of "Defence". SAAB AB, a clear defence company with 82% of its revenue derived from defence contracts is classified under the subsector "Aerospace"²⁷²⁸.

The unclear definition creates a challenge when the appropriate companies are chosen, the focus of this study is defence companies and thus including heavily diversified companies with little revenue stemming from defence products dilutes the results of the study. It is however nevertheless important for the chosen set of companies to be representative for the "The European Defence Industry".

²⁵ Boing Homepage: <u>http://www.boeing.com/</u> (2017-04-13)

²⁶ Erica Schattle, Industries & Market Research: Industry Classification Systems, <u>http://researchguides.library.tufts.edu/c.php?g=248798&p=1657253</u> (2017-04-13)

²⁷ Top 100 defence companies 2016, <u>http://people.defensenews.com/top-100/</u> (2017-04-15)

²⁸ A comprehensive structure for company classification, <u>http://www.icbenchmark.com/structure</u> (2017-04-12)

Dataset

In order to produce an unbiased and objective conclusion, the chosen sample must be as representative as possible of the population of the European defence firms. Luckily, the small size of the population simplifies the process of choosing data and is thus very helpful. 2 Different datasets were used in the event study, one Extensive and one Restricted. The extensive dataset includes all listed European companies that are classified as being active in the aerospace and defence sector according to DataStream's classification system. However, some companies that states that they are solely manufacturers of civilian aerospace or space products are clearly outside of the area of interest and are thus for the sake of focusing on defence companies dropped.

The restricted list on the other hand is a number of handpicked companies from the extensive list that were thoroughly studied, evaluated and thereafter chosen according to pre-determined criteria that were deemed important. To begin with, the companies in the restricted list are all European companies generating at least 50% of their revenues from defence contracts. Furthermore, subjective analysis of each company determines if the company is categorized as a defence company or not, this analysis is carried out from the perspective of an investor. All companies in the restricted list can therefore in the eyes of an investor confidently qualify as primarily defence companies and will thus be of interest to an investor seeking an exposure to that industry.

Table 1 and 2 show a quick description of the extensive and the restricted list respectively. For each company, data in the form of the adjusted closing price for each trading day for both the estimation window and the event window is downloaded through the software DataStream. The chosen companies are listed on different stock exchanges in Europe, with some companies even listed on more than one. Because different countries differ in holiday days, some stock exchanges are closed while others are open on some dates, creating missing values on some dates for some companies. However, this only occurs during the estimation window and thus only affects the estimation step of our event study, and given the 120-day length if the estimation window, one or two missing values have little overall affect. Regarding the situation of companies being listed on different stock exchanges, the stock that saw the highest activity in form of trading volumes was chosen, and the difference between volumes from stock exchange to stock exchange was so large that there were no hard cases.

Туре	INDUSTRY GROUP	CURRENCY	NAME	NATION	INTERNET ADDRESS
O:FACC	Aerospace	E	FACC AG	AUSTRIA	http://www.facc.com
F:AIRS	Aerospace	E	AIRBUS	NETHERLANDS	http://www.airbusgroup.com
F:SGM	Aerospace	E	SAFRAN	FRANCE	http://www.safran-group.com
F:AM@F	Aerospace	E	DASSAULT AVIATION	FRANCE	http://www.dassault-aviation.com
F:ALNE	Aerospace	E	NSE	FRANCE	http://www.nse-groupe.com
D:MTX	Aerospace	E	MTU AERO ENGINES HLDG.	GERMANY	http://www.mtu.de
W:SAAB	Aerospace	SK	SAAB 'B'	SWEDEN	http://www.saabgroup.com
RR.	Aerospace	£	ROLLS-ROYCE HOLDINGS	UNITED KINGDOM	http://www.rolls-royce.com
MGGT	Aerospace	£	MEGGITT	UNITED KINGDOM	http://www.meggitt.com
СОВ	Aerospace	£	COBHAM	UNITED KINGDOM	http://www.cobham.com
SNR	Aerospace	£	SENIOR	UNITED KINGDOM	http://www.seniorplc.com
D:RHM	Auto Parts	E	RHEINMETALL	GERMANY	http://www.rheinmetall.com
F:CSF	Defense	E	THALES	FRANCE	http://www.thalesgroup.com
F:ECAS	Defense	E	ECA	FRANCE	http://www.eca.fr
I:LDO	Defense	E	LEONARDO	ITALY	http://www.leonardocompany.com
BA.	Defense	£	BAE SYSTEMS	UNITED KINGDOM	http://www.baesystems.com
QQ.	Defense	£	QINETIQ GROUP	UNITED KINGDOM	http://www.qinetiq.com
ULE	Defense	£	ULTRA ELECTRONICS HDG.	UNITED KINGDOM	http://www.ultra-electronics.com
CMRG	Defense	£	CHEMRING GROUP	UNITED KINGDOM	http://www.chemring.co.uk
AVON	Defense	£	AVON RUBBER	UNITED KINGDOM	http://www.avon-rubber.com
CHRT	Defense	£	COHORT	UNITED KINGDOM	http://www.cohortplc.com
TK:ASE	Telecom. Equipment	TL	ASELSAN ELNK.SANVETC.	TURKEY	http://www.aselsan.com.tr

Table 1: Extended list for European defence companies.

Туре	INDUSTRY GROUP	CURRENCY	NAME	NATION	INTERNET ADDRESS
W:SAAB	Aerospace	SK	SAAB 'B'	SWEDEN	http://www.saabgroup.com
СОВ	Aerospace	£	COBHAM	UNITED KINGDOM	http://www.cobham.com
D:RHM	Auto Parts	E	RHEINMETALL	GERMANY	http://www.rheinmetall.com
F:CSF	Defense	E	THALES	FRANCE	http://www.thalesgroup.com
I:LDO	Defense	E	LEONARDO	ITALY	http://www.leonardocompany.com
BA.	Defense	£	BAE SYSTEMS	UNITED KINGDOM	http://www.baesystems.com
QQ.	Defense	£	QINETIQ GROUP	UNITED KINGDOM	http://www.qinetiq.com
ULE	Defense	£	ULTRA ELECTRONICS HDG.	UNITED KINGDOM	http://www.ultra-electronics.com
CMRG	Defense	£	CHEMRING GROUP	UNITED KINGDOM	http://www.chemring.co.uk
TK:ASE	Telecom. Equipment	TL	ASELSAN ELNK.SANVETC.	TURKEY	http://www.aselsan.com.tr

Table 2: Restricted list of hand-picked defence companies

Methodology

The event study approach (ESA)

The ESA is extensively described and explained in "Event Studies for Financial Research: A Comprehensive Guide" written by Doron Kliger and Gregory Gurevich. In order to determine the effect of an event on a security, the price is tracked during a specified period of that time called *the event window*. There is no consensus regarding the length of the event window or it's appropriate place in time relative to the date of the event, both are dependent on the type of the event and securities of interest. The event window almost always include the event date itself, but the placement of the window on the timeline can differ from case to case. For example, in order to study the effect of a take-over offer on a target's price, it is important for the event window to include some of the days prior to the official offer; this is due to the fact that there are always rumours that affect the price even before the actual event has taken place.

The length of the event window also depends on the type of event and security, the market often needs time (up to weeks) to digest new information and understand the consequences of it on a company's stock. Furthermore, there are some factors to consider, a long event window could result in disturbance as another separate event can take place during the event window and ultimately make it almost impossible to disentangle the effects of the different events from each other. On the other hand, an all to short event window could give a biased or inaccurate picture of the reaction of the market, as investors often need time to carefully study and asses the new information and it's implication.

All of the above was taken in consideration when deciding upon the length and placement of the event window. The nature of the event, the timing of the event, and the type of securities were all fundamental factors which the decision was based on. The election night occurred on 8th of November 2016, the voting began after the European stock exchanges closed and the winner was announced in the early morning European time on Wednesday the 9th of November. Thus, the event date is determined to be the date of the announcement that is, the 9th of November. This date, called further on day 0 is the first day of the event window and the last day is Thursday 10th, day 1.

Due to the earlier mentioned fact that the election outcome could not have been anticipated and therefore not already be priced in the stock of the companies, it was deemed unnecessary to extend the event window to include days prior to the event date. An event window length of only two days is chosen in regard to the study's focus on the very short term reaction to the election outcome, the goal is thus not to study the effects of Trumps policies, speeches, secretary appointments etc. but rather limit the scope to only the news of his election. Furthermore, the statue of The United States as the sole super global power in the world makes the election of Donald Trump with no doubt a huge

political event that was bound to call for reactions from around the world, these reactions that could come in the form of statements from other head of states for example, can be considered to be related events that can effect and thus distort our results.

As for the estimation window, there is no agreement on how long it should be. It could be tempting to extend the length of the estimation window as much as possible in hope to minimize the estimation error but this comes with drawbacks. If for example data from as far back as the Cold War when military spending in Europe was much higher is included, the betas could be biased. On other hand, as the world markets saw increased volatility during the last weeks leading to the election, a short estimation window can misestimate beta. An estimation window of the moderate length of 120 days is most commonly used and was judged to be appropriate and thus chosen.

In order to estimate the stock prices during the event window, the CAPM is applied and historical prices from the estimation window are used to perform a simple regression where the stock return is the dependant variable and the market return is the independent variable, the parameter for the independent variable that is produced from this regression is beta (β). Using this beta, which is unique for each company's stock, an estimation of the would-be returns in case if Hillary won can be made. The market return is the return of a chosen market portfolio which is the wide covering S&P 350 Europe comprised of 350 components ranging from small cap to large cap companies across Europe.

The first step after the preparation procedures above are completed is to produce abnormal return during both the event and estimation window for all companies.

$$\widehat{AR}_t^i = R_t^i - \widehat{NR}_t^i \qquad \qquad \text{Equation (1)}$$

Where

$$\widehat{NR_t^i} = \alpha_i + \beta_i R_t^m + \varepsilon_t^i$$
 Equation (2)

Where AR_t^i is the abnormal return of a company *i* stock at day *t*, derived by subtracting the company's stock actual return on the same date from the estimated return. The parameters a_i and β_i are estimated through regressing actual returns on market returns for each day *t*. The abnormal return can also be directly derived from the regression in Equation 2 as the abnormal returns are simply the residuals from this regression.

Once the estimated abnormal returns during the event window are calculated, analysis can begin. Given the relatively short chosen event window and limited number of companies in the sample, preliminary conclusions can be drawn by a quick look at the abnormal returns for each company. However, in order to draw any confident conclusions, statistic testing must be applied. The most common test, the t-test will be used to test whether abnormal returns differ from zero or not. The null hypothesis H_0 and the alternative hypothesis H_1 are thus:

$$H_0: AR_{i,t} = 0$$

$$H_1: AR_{i,t} \neq 0$$

An event study implies a hierarchy of calculations, where abnormal returns can be averaged across companies to Average Abnormal Returns (AAR)

$$AAR_t = \frac{1}{N} \sum_{i=1}^{N} AR_{i.t}$$

And also cumulated to Cumulative Abnormal Returns (CAR)

$$CAR_i = \sum_{t=T_1+1}^{T_2} AR_{i.t}$$

That can in turn be averaged to Cumulative Average Abnormal Return

$$CAAR = \frac{1}{N} \sum_{i=1}^{N} CAR_i$$

Significance analysis and test can be performed on all these different levels, common for all tests however is the assumption that abnormal returns follow a normal distribution. The standard deviation on the other hand is different for each level.

For each respective level, the following tests can be performed to test for significance. However, the interesting effect must not be restricted to the event date itself but can also stretch to the consequent days as well. Therefore the Cumulative Abnormal Return during the event window is of main interest. However, One can also test the null hypothesis that the abnormal return differs from zero for each specific firm in a specific time, although this is often impractical, the low number of firms and short event window in this study allows for these tests that show how abnormal returns are distributed across the event window, giving important insight on how fast investors were to trade based on the election outcome. The following test is preformed

$$t_{AR_{i,t}} = \frac{AR_{i,t}}{S_{AR_t}}$$

Where S_{AR_t} is the standard deviation of the abnormal returns in the estimation window?

Testing if the cumulative abnormal returns are different than zero is done with the following test:

$$t_{CAR} = \frac{CAR_i}{S_{CAR}}$$
$$S_{CAR} = \sqrt{L_2 * S_{AR_i}^2}$$

 L_2 being the number of trading days within the event window

Beyond analysing these different aggregated forms of the abnormal returns, an equally-weighted index dubbed "Defence-index" is created using the abnormal returns of the different companies from the restricted list. This is done in order to produce a graph of the index around the event date and to preform t-test on the averaged abnormal returns (AAR) during the days of the event window.

Results

Where

The graph below is to provide a guick overview of the abnoral return of the Defenceindex around the election.



Graph 1: European Defence market's reaction post Trumps presidential win announcement

Table 3 below shows the results of t-tests done on all 22 companies in the extended list during each
day within the event window. The table shows the abnormal return for the specific companies during
the event window, the test-score from the test and the accompanied significance level.

г

Company	Date	Abnormal Return (%)	t-score	Significance
1	09nov2016	-2.46214	-1.32127	
1	10nov2016	.42847	.2299318	
2	09nov2016	1.163933	1.029271	
2	10nov2016	2.280491	2.016648	* *
3	09nov2016	0262362 -	.0261631	
3	10nov2016	2.298884	2.292482	* *
4	09nov2016	3.745966	4.456341	*****
4	10nov2016	2.491249	2.963683	****
5	09nov2016	4.029643	3.874029	****
5	10nov2016	1.19314	1.147064	
6	09nov2016	1391161 -	.0822038	
6	10nov2016	2.24444	1.326242	
7	09nov2016	.003901	.0040478	
7	10nov2016	2.80497	2.910498	****
8	09nov2016	-4.012637	-3.42255	
8	10nov2016	5.751572	4.905762	*****
9	09nov2016	5.481045	3.572033	*****
9	10nov2016	4.728416	3.08154	****
10	09nov2016	2.382005	2.067726	* *
10	10nov2016	2.560033	2.222266	* *
11	09nov2016	5.551341	6.275504	*****
11	10nov2016	4.695805	5.308364	*****
12	09nov2016	4.821438	3.133649	****
12	10nov2016	1.763539	1.146196	
13	09nov2016	2.626755	1.974001	**
13	10nov2016	2.456299	1.845903	*

*	1.845903	2.456299	10nov2016	13
* * * * * *	3.538066	5.191291	09nov2016	14
* * *	2.565114	3.76371	10nov2016	14
* *	2.081217	1.937035	09nov2016	15
* * * *	2.853493	2.655811	10nov2016	15
* * * * * *	4.272738	4.31682	09nov2016	16
* * * * * *	5.173292	5.226665	10nov2016	16
* * *	2.356318	4.053021	09nov2016	17
	1.028784	1.769576	10nov2016	17
	6114206	-1.027434	09nov2016	18
* *	2.011591	3.380289	10nov2016	18
	.6428577	.9351993	09nov2016	19
	0384951	0560009	10nov2016	19
	8683032	-1.644367	09nov2016	20
* * * * * *	3.463765	6.559575	10nov2016	20
* * *	2.414759	3.504345	09nov2016	21
* * * * *	3.197186	4.639817	10nov2016	21
* * * *	2.808649	4.267343	09nov2016	22
	3636111	5524552	10nov2016	22

Where: * constitutes 10% significance, ** = 5%, *** = 2%, **** = 1%, **** = 0.02% and ***** = 0.01%.

Company	Date	CAR (%)	t-score	Significance
1	09nov2016	-2.03367	7716925	
2	09nov2016	3.444425	2.15379	**
3	09nov2016	2.272648	1.60253	
4	09nov2016	6.237215	5.246749	*****
5	09nov2016	5.222783	3.550449	*****
6	09nov2016	2.105324	.8796677	
7	09nov2016	2.808871	2.060895	* *
8	09nov2016	1.738935	1.04879	
9	09nov2016	10.20946	4.704787	*****
10	09nov2016	4.942039	3.033483	* * * *
11	09nov2016	10.24715	8.191031	*****
12	09nov2016	6.584977	3.026308	****
13	09nov2016	5.083054	2.70108	****
14	09nov2016	8.955002	4.3156	*****
15	09nov2016	4.592846	3.489367	*****
16	09nov2016	9.543486	6.679353	*****
17	09nov2016	5.822597	2.393629	* * *
18	09nov2016	2.352854	.9900702	
19	09nov2016	.8791984	.4273489	
20	09nov2016	4.915208	1.835268	*
21	09nov2016	8.144161	3.968244	*****
22	09nov2016	4.819798	2.243127	* *

Table 4 below shows the cumulative abnormal return (CAR) during the event window, t-statistic and accompanying significance level.

Where: * constitutes 10% significance, ** = 5%, *** = 2%, **** = 1%, **** = 0.02% and ***** = 0.01%.

Table 5 below shows the abnormal return of the Defence-index, date, t-statistic and the accompanied significance.

Date	Defence Index AR (%) t-score	Significance
09nov20	016 2.03178	1.484601	**
10nov20	016 2.917691	2.131927	

Where: * constitutes 10% significance, ** = 5%, *** = 2%, **** = 1%, **** = 0.02% and ***** = 0.01%.

The following sets of results are produced using the restricted list of companies that are much more focused on defence.

Table 6 below shows the results of t-tests done on all 9 companies in the restricted list during each day within the event window. The table shows the abnormal return for the specific companies during the event window, the test-score from the test and the accompanied significance level.

Company	Date	Abnormal Return (%)	t-score	Significance
1	09nov2016	3.745966	4.456341	*****
1	10nov2016	2.491249	2.963683	****
2	09nov2016	5.481045	3.572033	*****
2	10nov2016	4.728416	3.08154	* * * *
3	09nov2016	2.382005	2.067726	**
3	10nov2016	2.560033	2.222266	**
4	09nov2016	5.551341	6.275504	*****
4	10nov2016	4.695805	5.308364	*****
5	09nov2016	5.191291	3.538066	*****
5	10nov2016	3.76371	2.565114	***
6	09nov2016	1.937035	2.081217	* *
6	10nov2016	2.655811	2.853493	****
7	09nov2016	4.31682	4.272738	*****
7	10nov2016	5.226665	5.173292	*****
8	09nov2016	4.053021	2.356318	***
8	10nov2016	1.769576	1.028784	
9	09nov2016	3.504345	2.414759	***
9	10nov2016	4.639817	3.197186	****
10	09nov2016	4.267343	2.808649	****
10	10nov2016	.5524552	.3636111	

Where: * constitutes 10% significance, ** = 5%, *** = 2%, **** = 1%, **** = 0.02% and ***** = 0.01%.

Company	Date	CAR (%)	t-score	Significance
1	09nov2016	6.237215	5.246749	*****
2	09nov2016	10.20946	4.704787	*****
3	09nov2016	4.942039	3.033483	****
4	09nov2016	10.24715	8.191031	*****
5	09nov2016	8.955002	4.3156	*****
6	09nov2016	4.592846	3.489367	*****
7	09nov2016	9.543486	6.679353	*****
8	09nov2016	5.822597	2.393629	***
9	09nov2016	8.144161	3.968244	*****
10	09nov2016	4.819798	2.243127	**

Table 7 below shows the cumulative abnormal return (CAR) during the event window, t-statistic and accompanying significance level.

Where: * constitutes 10% significance, ** = 5%, *** = 2%, **** = 1%, **** = 0.02% and ***** = 0.01%.

Table 8 below shows the abnormal return of the Defence-index, date, t-statistic and the accompanied significance.

Date	Defence Index AR (%)	t-score	Significance
09nov201	6 4.043021	3.142112	* * * * *
10nov201	6 3.308354	2.571151	

Where: * constitutes 10% significance, ** = 5%, *** = 2%, **** = 1%, **** = 0.02% and ***** = 0.01%.

Discussion

The results

A glance at the different presented results from the restricted list (Tables 6, 7 and 8 and graph 3) shows clear abnormal returns on both the 9th and the 10th November for every company in the dataset. The abnormal returns range from one to sex percent on the mentioned dates. Thus, the company's stock returns did increase, abnormally, during two trading days after the election of Donald Trump.

The null hypothesis is the following:

Defence stocks showed NO abnormal returns after the election of Donald Trump

Or mathematically:

$$H_0: AR_{i,t} = 0$$

$$H_1: AR_{i,t} \neq 0$$

Since $AR_{i,t} \neq 0$ in every single company on the restricted list, it looks as if the null hypotheses will be rejected. A t-test was preformed and showed that indeed the null hypothesis of no abnormal returns can be rejected with at least 95% confidence for all companies except for company number 8 during the observation made on the 10th of November. Using the cumulative abnormal returns instead produces significance with at least 95% confidence for every company in the restrictive dataset.

Rejecting the null hypothesis:

$$H_0: AR_{i,t} = 0$$

is thus made with at least 95% confidence of not making a type I error which is incorrectly rejecting a true null hypothesis. In other words, the observing of untrue abnormal returns is a type I error which we have at most 5% of making and consequently at least 95% of not making. More simply, we can be sure with a 95% "statistical" certainty, and we say statistical since significance has assumptions of its own, such as normality.

Risk of biasness in data selection

The data set is obviously small since the defence industry in Europe is simply not fragmented enough to enable a study for a large dataset. This is due mainly to the high research costs that are associated in developing defence systems, which only few private companies can bear. Many firms are state-owned and are or were at some point state-funded to cover for the enormous R&D costs. This should not however affect that data significantly since the cumulative revenues from the firms in the

restricted list combine to such a large portion that it can be assumed that the firms are representative for the European defence industry as a whole.

If for example, a study about the effect of some new emission tax on the auto industry in Europe was to be conducted, one would simply gather no more than a dozen major European car manufacturers for the data set. If a study was to be conducted on the passenger aircraft industry only Airbus, Lear Jet, Fokker and Boing would make it to the data set as these are practically the only major passenger aircraft producers in the world.

Including more companies to increase the data set is not only redundant but can lead to misleading results. As shown in the results' tables coming from the extended list, many companies have not experienced abnormal returns at all. For those who have, significance tests are unable to reject the null hypotheses of NO abnormal returns and it would seem that investors are not predicting an increase in the European defence business. This however is entirely misleading since the election of Trump affected different sectors with great variety. Trump for example has sworn to tear up the Trans-Atlantic Trade agreement plans as soon as he steps to office. This promise means of course that hopes of free trade with the United States have diminished greatly and that some sectors may not experience the growth once presumed by investors²⁹.

Loosening the definition of a defence company to increase the data set is harmful for the study and is a major biasness factor. Including firms which are barley defence companies or which produce products loosely related to defence may produce misleading results were different effects from the election outcome effected different sectors in a variety of ways. It may be so that Airbus defence division saw a solid prediction of increased sales by investors while its civil aviation division saw a decrease in predicted sales that cancelled out the defence industry's perceived future growth

Investors behaviour

The produced results do not conclude the presence of a degree of causality during the event. It is not certain that the election of Donald Trump caused the abnormal returns of the defence stocks nor that it affected it in anyway. Furthermore, to make certain such causality would require complex regressions with several dummy variables to filter the sole effect of Trump's election. Such a regression is difficult to make since the correspondent dummy variables will be very hard find and measure. One such dummy variable could be Russian military exercises, major classified orders and other insider information which are all very hard to obtain and measure. Consequently, the mentioned method using the CAPM was chosen.

²⁹ David Smith, The Guardian, Trump withdraws from Trans-Pacific Partnership amid flurry of orders

https://www.theguardian.com/us-news/2017/jan/23/donald-Trump-first-orders-trans-pacific-partnership-tpp (2017-0510)

Research however can be done to find any "dummy variables" which could have biased our results. For example, which world events occurred on the same dates and were there any other significant industry related events that took place. After rigorous study of the two dates, we found that no events could have significantly affected the defence industry during the two dates except for the presidential election. Naturally, since a global super power will choose its leader in a historic race, many companies and policy makers refrained from taking any major action until it was decided who will run the free world for the next four years. In other words, the only "shock" or new industry significant information that investors received on the 9th and on the 10th of November was Trump's election as the 45th president.

Thus, we can with certain confidence say that investors on the two dates acted upon mostly if not solely on the new information that Trump has been elected and chose to buy defence stocks predicting increased business and future incremental cash flows.

It is important to separate *action*, *promises* and *speculations*. Trump becoming the president was an *action* or in this sense an event, he made *promises* about leaving NATO and Investors *speculated* to which degree and even if these promises will be fulfilled and acted accordingly. Thus, the abnormal returns we see are just investors trading on information that is still uncertain and loose. It is not evident yet that Trump will go through with his promises and that the European defence sector will see a large increase in business. The abnormal returns on the 9th and 10th are therefore based on mostly speculation and not concrete facts.

This means that if Trumps really leaves NATO or does anything concrete that will lead to an increase in the European military spending, higher abnormal returns will be obtained. This however, is yet to occur. At the moment, there have been only meetings by European defence ministers and some planning to move towards a stronger militarily Europe. It is vital for the reader to understand that the goal of the study is not to determine whether Trump will or will not abandon Europe, but to understand the belief of the market consisting of millions of agents who trade according to their belief. The investors who traded in favour of Trump leaving Europe can all be wrong and thus making the abnormal returns unjustified and the defence securities overpriced.

Critical Assumptions

To further strengthen the counter-factual hypothesis, a study of two events that shook both candidates' campaigns and their consequent effect on European defence stock returns are analysed. The first event is a video released by the New York Times on 7th of October, where Donald Trump made degrading and offensive remarks towards women. The short video was deemed so serious that House Speaker Paul Ryan and several other heavy-weight republicans dropped their support for the republican candidate. A recovery from the scandal was deemed difficult or even impossible. The

second event is when the FBI director James B. Comey informed congress through a letter that the FBI was investigating additional emails regarding a connection with a previous probe that was concluded on 5 June. The timing of this letter on the 28th of October, just 11 days before the election, was a big hit to the Clinton campaign and the assumed certain victory by her was put to the question.

By analysing abnormal returns around these two events, a picture of how investors investing in European Defence stocks regarded the two candidates can be maintained. The hypothesis is that lower or even negative abnormal return should be observed after or around the Trump Scandal, and higher abnormal returns around the Clinton email event. The results are presented in Graph 1 and 2 below and are clearly inconclusive. Thus, the hypothesis finds footing only in theory and is not further supported by any market reaction to the two scandals.



Graph 2: European defence market's reaction post the Trump "locker-room talk" scandal



Graph 3: European Defence market's reaction post the Clinton-Email reinvestigation announcement

The companies were chosen into the data set on the premise that they were operating in Europe and that their revenue came, to some degree, from defence. The geographic nature of the revenues however, was not taken in consideration. The Italian defence company Leonardo SPA gets c.a. 37% of its revenues from the US and Canada but less than 30% from Europe. This means of course that the abnormal returns coming from the mentioned firm might not be because Europe will spend more on defence but from other factors that will affect its North American Market. The election of Donald Trump did indeed trigger abnormal returns for many U.S. based defence firms. This however, is illogical since Trump's promises on defending Europe should mean a downsizing of the American military in the European continent and thus decreasing business for American defence companies. Why then do we still observe abnormal returns for U.S. defence companies? And can it be the case that these abnormal returns in the United States and Europe are uncorrelated with Trumps election and are just an effect of a general bullish market view?

The answer to the mentioned dilemma is that Trump Also vowed to strengthen the US military as so other republican presidents before him did. So, even if Trump threatens to down size the force in Europe, He promises more funding for the military in general. And this promise of extra funding is the major factor explaining why the American defence sector also experienced abnormal returns. Another explanatory factor would be that some European countries thought that building a stronger military is too complicated and expensive. Instead, Poland sought after pleasing Trump and his "bring home the jobs" policy by buying American made weapons. Trump will then potentially look at Poland more favourably when it calls on his help during an invasion or a crisis³⁰.

Investors have probably predicted this behaviour by some European countries like Poland, and bought shares in US based defence companies. The analysis is that more countries will try harder to please Trump by helping him fulfil his election promises. One can already read about companies like the Indian giant Infosys who vowed to hire more than 10 000 new American workers in Indiana, an obvious move to sway President Trump³¹.

Another point that can be made is that Trump's "Europe threats" did not affect the observed abnormal returns. Instead, it was investors who saw an increasingly conflicting world with Trump as president. That is, it did not matter what he said about not protecting Europe, investors thought that there will be more conflicts in the world and flocked to assets of companies that deal in this sector. Defence companies also mostly gain during turbulent times, as they did after 9/11.

³⁰ Michael D. Shear and Jennifer Steinhauer, The New York Times, Trump to seek 54 billion increase in military spending <u>https://www.nytimes.com/2017/02/27/us/politics/Trump-budget-military.html</u> (2017-05-10)

³¹ Stephen Nelllis, Infosys plans to hire 10,000 U.S. workers after Trump targets outsourcing firms, Reuters, http://www.reuters.com/article/us-infosys-usa-idUSKBN17Y09Y (2017-05-03)

Future Research

Future research can focus on other events that may affect the military spending of one or several nations. Although many events have a direct cause and effect relationship with the prices of commodities or other assets, military spending is very different. A draught has for example the immediate and obvious effect of raising crop prices and maybe less returns for companies in the crops business. Military spending however, is much more difficult to predict. Why some nations choose to spend more or less on military is a combination of many factors that range from the nation's economy to the socio-political environment. After the Vietnam War, the U.S. military was deemed broken and not functioning as it did in World War 2, one could rapidly conclude then that the U.S. will pour money into its military to fix it which will mean more business for the defence companies involved. However, after Vietnam the American people were fed up with war, so it could easily be that one should anticipate a large downsizing of orders from defence companies since US leadership will not enter another war for a long time.

Analysing these many factors is crucial to understanding the prospect of the defence industry. It is important to remember that the defence industry unlike other products has only governments as clients. These governments will act in turn, most of the time, in the interest of their people and country. Future studies can attempt to detangle these many effects to produce better metrics for analysing the future of a defence industry in any country.