Master Thesis U.S.E

The stock market reaction to the recent success of far-right parties in European, national elections

First supervisor: Lara Spaans

Second supervisor: Dr. Solomon Zori

submitted by:

Paul Jan Mark Schildknecht

Abstract

The recent trend of victorious far-right populistic parties (FRPP) challenges established political landscapes and questions the globalised economy and sustainability efforts. This study examines the election effect of FRPP's recent success in Europe on stock market's returns and volatility as well as the perception of sustainability. It provides evidence on general election effects on stock markets and how these change with a successful participation of FRPP. In addition, I investigate, if the valuation of sustainability changes around the election of a FRPP government. For this purpose, I use a return and volatility event study of 66 elections in 16 European countries. The results are further regressed in a cross-sectional analysis on variables describing election characteristics, the recent rise of FRPP and the companies' environmental performance. The findings reveal that the volatility can double around elections but does not yield an appropriate return compensation for investors. When a FRPP enters successfully the election competition, this election effect is even accelerated. Lastly, I find that FRPP election wins change investor's perception of sustainability. They value environmental performance in the long run, as they expect, that the green transition is slowed, but not stopped by the short-term political change.

JEL classification: Q58, G14, D72

Keywords: National elections, Far-right populism, Sustainability, Event study

Contents

1 Introduction

The current political European landscape has been shifting since 2008. Favoured by the economic trauma of the financial crisis, far-right populistic parties (hereafter FRPP) were able to gain an increasing amount of voters trust in national elections (Guriev and Papaioannou, 2022). FRPP have become an established power in nearly every European parliament influencing the political sentiment and shifting the public attention and discourse to the right. Their key claims tend to be national identity and sovereignty rather than immigration, global cooperation, or European integration e.g., Geert Wilders mentioned in his election campaign: "Put the Dutch back as number one, the Netherlands will be returned to the Dutch, the asylum tsunami and migration will be curbed." (van Campenhout, 2023). Resulting in national separation, reduction in economic collaboration and questioning global climate protecting policy, the increasing role of this political ideology severely threatens sustainable and economic ambitions (Funke et al., 2023).

National elections have the potential to completely change the political and economic environment depending on the winning party and resulting government, which determines the future economic, monetary, and regulatory conditions. The uncertainty around the election day about the future political and economic orientation is translated into uncertainty at stock markets affecting companies and investors (Pástor and Veronesi, 2012).
The new radical ideology of FRPP, succeeding in national elections, makes the future economic implications more uncertain and difficult to predict, which leads to the question, I aim to answer in this research: Does the recent rise of right-wing populistic parties affect investors' returns and risks at national stock markets in European countries? In addition, FRPP question or at least don't support efforts to combat climate change influencing regulatory policies, the public discourse about sustainability and the valuation of green and brown companies, resulting in the question, I am trying to answer with this study: Does the election of FRPP into the government impact returns and volatility of green and brown firms differently?

This paper uses an event study methodology to determine the general reaction of returns and volatility around national elections in European countries. For this purpose, I calculate the returns of companies, listed in the national Morgan Stanley Capital International (MSCI) country indices, based on a single-factor model and the volatility with a generalised autoregressive conditional heteroscedasticity (GARCH) model. The sample of this study contains 16 European countries spanning 66 elections from 2008 to 2024. In a second step the obtained results are included into a cross-sectional regression on independent variables describing the recent success of the FRPP. I examine if the increase in far-right voting share alters the election effect on investors' returns and risks. Finally, the effect on green and brown companies is analysed, when a FRPP is elected into the government. The companies are characterised by their sustainable performance and investigated whether those elections have implications for their risks and returns.

Building on the theoretical definition of FRPP and their political, societal and economic consequences (Funke et al., 2023; Guriev and Papaioannou, 2022), this study examines the election effects on stock markets in line with the partisan theory (Hibbs, 1992; Leblang and Mukherjee, 2005) and the theoretical framework on political uncertainty by Pástor and Veronesi (2012). Using a cross-country approach I cover multiple elections similar to the research by Pantzalis et al. (2000) and Białkowski et al. (2008). Finally, this research is based on the work by Seltzer et al. (2022), Pástor et al. (2021) and Ramelli et al. (2021) about how an election winner, who sees climate change sceptical, affects company´s stock market performance with different sustainable performances.

Most of the previous literature has focused on the impact of elections on the stock market examining a single-country scale and only a few used an international, multiple elections approach (Białkowski et al., 2008; Pantzalis et al., 2000). My study sheds a light on the scare existing cross-country literature by focusing on the European stock market reaction to national elections. Additional value is added to the literature as this study investigates the election effects on a security

and not on an index level. For this purpose, I transform the theoretical framework by Białkowski et al. (2008) to derive the abnormal volatility around elections from an index to a security level analysis enabling a company level analysis and making it more applicable for other studies examining event induced volatility.
Furthermore, this study attempts to provide new insights into the mixed empirical puzzle, particularly regarding the existence of investors' returns and their timing around national elections (s. e.g., Antonakakis et al., 2013; Baker et al., 2016; Bialkowski et al., 2007).
The results of this study confirm that national elections induce an extensive increase in volatility starting already ten days prior to national elections in European countries. As a consequence of political uncertainty, the volatility is 64% higher in the five days and 108% higher in the thirty days around the elections in European countries. The returns grow as well significantly by around 0.8%, but this trend is heavily country dependent and less robust approving an insufficient return compensation for investors.

This study is, to my knowledge, the first study to examine national stock market reactions in European countries to far-right populistic politics. Previous research has so far focused on the 2016 American election of Donald Trump (s. e.g., Ramelli et al., 2021).
My findings show that a successful participation of a FRPP cause even more political uncertainty, as they accelerate the election effect on returns by around 5-10% and on volatility by around 9%.
Regarding their impact on sustainability I found that companies' stock market reaction to a FRPP election win depends on their environmental performance. Greener firms experience lower risks and higher returns around those elections showing, that investors value long-term sustainability higher than a potentially transition towards right-wing policy. Investors seem to expect that the green transition will come in the future regardless the political change in the national government.
Contributing to the ongoing public debate about the assessment of FRPP and their economic and sustainable consequences, this study reveals important impli-

cations for investors, companies and policy makers.

The research is structured as follows: Section 2 provides background information about the European context of FRPP's recent success in European countries. Based on the most important literature, section 3 defines the FRPP and elaborates the effects of elections on stock markets. In the following section 4 three distinct hypotheses are developed in line with previous studies. Using the methodology and sample described in previous chapter, section 6 provides an overview and a detailed analysis of the results. The study concludes with a discussion of the core findings indicating important implications, potential limitations and possibilities for future research.

2 Background

Historically the party system in European countries was characterised by a stable political environment consisting of moderate parties in the middle of the party spectrum, which support the foundations of the liberal democracy (Caramani, 2015; Casal Bértoa and Enyedi, 2022; Wodak et al., 2013). During this time, FRPP already exist in only a few European countries, but without having any influential power (Caramani, 2015; Langsæher, 2023).

Since the economic crisis in 2008, FRPP were found and able to increase their impact in national parliaments. Their political style and radical claims based on populism and national identity, contradict most established moderate parties (Guriev and Papaioannou, 2022; Noury and Roland, 2020). With their attitude to polarise and break taboos in the public discourse and their political positions, they directly attack the stable party system, influence the public sentiment and refute the fundamentals of a liberal democracy (Guriev and Papaioannou, 2022).

In contrast to the USA, where far-right populism is much more established in the political discourse, especially in the Republican party (Greven, 2016), European FRPP are a new upcoming ideology and party in most of the countries. It is uncertain how radical their political style and positions would look like, when they join the parliament or government. In addition, even though polls exist, FRPP results are often underestimated before the election, thus the large share of FRPP voters is often perceived as a surprise (s. e.g., Berman, 2018; Koc, 2023; Traynor, 2011).

In many European countries modest parties try to avoid collaborating with FRPP because of their radical claims (Guriev and Papaioannou, 2022; Noury and Roland, 2020). The increasing share of FRPP reduces the share of possible coalitions and diminishes the probability to build a stable majority government after an election. This changes the whole party system and government formation processes (Mudde, 2014).

In summary, the FRPP challenge and refute established and well-known political positions and claims. As a consequence the political historically stable environment becomes, especially around elections, more uncertain and volatile.

3 Literature Review

The current increasing number of FRPP succeeding in general elections and joining national parliaments or governments influences the political sentiment. As stock markets can be seen as a barometer of the political sentiment (Nofsinger, 2005), they shouldn't only react to election results, but also to the increasing share of FRPP in national parliaments. According to the efficient market hypothesis (EMH), stock markets are assumed to be semi-strong efficient meaning that public available information is immediately incorporated (Fama et al., 1969). As a consequence, when electoral results become public, these should cause a stock market reaction to incorporate the new information and future implications. By analysing prior literature I will at first describe the political ideology of the FRPP and consequences for the economy and climate change policy. In the following, I will review previous studies on how stock markets react to national elections.

3.1 Definition and consequences of Far-right populistic parties

FRPP´s political positions prefer disintegration and nationalism rather than multinational politics based on cooperation like the integration into the European Union and a further globalised world (Guriev and Papaioannou, 2022). Similarly, the political ideology of FRPP reject or at least don't support politics mitigating climate change[1], because their strategy is based use multi-national cooperation (Kulin et al., 2021).

The expected economic consequences of a government including a FRPP, dismantling the established institutions and international collaboration, are misallocation, reduced trade, lower investments and slower growth (Guriev and Papaioannou, 2022). In the long term the economic isolation and reduction in macroeconomic stability under a populistic government decreases the gross domestic product (GDP) per capita by 10 percent Funke et al. (2023). This development

[1]Examples for FRPP'S attitude regarding climate change mitigation efforts in the sample: Germany (Kuner, 2024); Dutch (PVV, 2023); Sweden (Hirschberg and Hallgren, 2023); Hungary (Berwyn, 2024) ; Spain (de Nadal, 2021); Italy (Giordano and Mathiesen, 2023); Austria (Kurmayer, 2023).

would have consequences for stock markets, as prices and returns are correlated to the general conditions of the market and economy (Asprem, 1989; Fama and French, 1989; Gan et al., 2006).

Long-term stock market developments are only examined for moderate right-wing party governments and not for FRPP. This literature is based on the partisan theory: Left-wing governments, preferring lower unemployment rates and an increase in social welfare, are more willing to implement expansive politics, which includes higher risks of inflation (Hibbs, 1992). In contrast, right-wing governments try to prevent higher inflation through a more stable economic environment and less expansive politics (Bialkowski et al., 2007; Herron, 2000). The stock market react to left-wing (right-wing) governments with an decrease (increase) in trading volume, stock prices and volatility (Leblang and Mukherjee, 2005). Contradictory, Döpke and Pierdzioch (2006) and Bialkowski et al. (2007) found no significant difference in the stock market development between left- and right-wing governments during their term of office.

3.2 Election effects on stock market returns and risks

Under the EMH, information about events, like national elections, is directly priced in when it is public and relevant for investors and listed companies (Fama et al., 1969). As, according to the home bias anomaly, most investors are still not diversified globally, but invest mostly in domestic stocks, the market reaction to national elections is extremely important for their portfolios and investing behaviour (French and Poterba, 1991; Goetzmann and Kumar, 2008). New governments often influence the fiscal, monetary, regulatory and subvention policies affecting company´s and investor´s short- and long-term strategies (Pantzalis et al., 2000; Pástor and Veronesi, 2012). In addition, bankers adjust their loaning terms according to their (mis-)alignment with the incumbent government affecting companies' financing strategies and costs (Dagostino et al., 2023). To estimate possible implications of the election outcomes every market participant tries to assess the probability of each election outcome. The attention by journalists, pollsters and analysts could clear some, but not all uncertainty, which makes it

difficult for investors and companies to anticipate the stock market reaction prior to elections (Pantzalis et al., 2000).

Previous studies indicate that due to higher uncertainty around elections the stock market volatility, thus the risks for investors, increases (Białkowski et al., 2008; Lausegger, 2021; Pantzalis et al., 2000; Pástor and Veronesi, 2013). A compensation seems to be given to investors in form of a risk premium for those countries' stocks during times of uncertain political environment (Kelly et al., 2016; Pantzalis et al., 2000; Pástor and Veronesi, 2013). Conversely, Białkowski et al. (2008) and Santa-Clara and Valkanov (2003) cannot support the evidence of a risk premium.

Pástor and Veronesi (2012) theoretically prove, when examining unexpected political changes in an equilibrium model, that election uncertainty causes political uncertainty which leads to economic and financial uncertainty. Market participants have difficulties estimating the uncertain future political and economic environment leading to a decrease in macroeconomic activities like corporate investments and real estate activities (Aisen and Veiga, 2013; Antonakakis et al., 2013; Bloom et al., 2007; Gholipour, 2019; Gulen and Ion, 2015). This influences investors' behaviour, thus prices and risks at stock markets (Asprem, 1989; Fama and French, 1989; Gan et al., 2006).
As a consequence, economic and financial uncertainty cause stock market uncertainty leading to an increase in stocks' volatility and investors' risk (Baker et al., 2016; Pástor and Veronesi, 2012). For bearing higher risks investors receive a positive risk premium (Brogaard et al., 2020; Kelly et al., 2016; Pástor and Veronesi, 2013). Therefore, an uncertain political environment is an important driver of the stock risks and prices (Brogaard et al., 2020). [2]

In a multi-country approach, Pantzalis et al. (2000) underlines the argumentation of Pástor and Veronesi (2012) by investigating the effect of 33 national elections from 1974 to 1995. They find a strong positive correlation between political un-

[2]In contrast, Antonakakis et al. (2013) finds a negative relationship of political uncertainty and stock market returns on a monthly basis using the S&P500 between 1985 and 2013.

certainty and the risk premium starting prior to the election and continuing some days after it. Factors driving the uncertainty are the press freedom in the country and if the incumbent government is replaced (Goodell et al., 2020; Pantzalis et al., 2000). The latter effect is accelerated resulting in higher returns after elections, when the replaced government was associated with an unbalanced, risky fiscal and economic policy (Eichler and Plaga, 2020).

Election induced, higher volatility is also investigated in the study by Białkowski et al. (2008) covering 134 elections in 27 OECD countries from 1980 till 2004. Over a fifty days window around the event the volatility is 23.42 percentage higher compared to the counterfactual, that no election took place. In contrast to Pantzalis et al. (2000) the volatility is significantly higher after the election and stays on this level for some days after the election. When the winner of the election is a minority government, when the election reveals surprising results, i.e. the difference between runner-up and winner is small, and when the political orientation of the new and the incumbent government is not the same, the results contain more uncertainty, thus the volatility tends to increase even more.
In contrast to the papers by Pástor and Veronesi (2013), Brogaard et al. (2020) and Pantzalis et al. (2000), Białkowski et al. (2008) examined that the higher risks don´t induce significant, positive returns or a risk premium. These results are confirmed, as Santa-Clara and Valkanov (2003) found no concentration of returns around election days by examining the stock market returns during American presidential cycles.

When controlling for the political ideology of the election winner, investors' returns behave in line with the partisan theory: they increase in election years, when a right-wing party is expected to win and decrease in expectation of a left-wing government (Girardi, 2020; Leblang and Mukherjee, 2005). Right-wing governments, more favourable to capital, improve the economic environment compared to left-wing, which focuses on social redistribution and welfare politics. Opposite results are found partly in the research by Lausegger (2021) as his regression suggest significant negative effects of a right-wing triumph on national stock markets.

To conclude, all studies agree on a higher volatility and risks in national stock markets as the main election effect (s. e.g., Białkowski et al., 2008; Pástor and Veronesi, 2012). The deselection of the incumbent government, close election outcomes and the election of a minority government seems to accelerate this effect (Białkowski et al., 2008; Pantzalis et al., 2000). Inconsistent results are found regarding the returns as a consequence of the increase in risks (Baker et al., 2016; Białkowski et al., 2008; Brogaard et al., 2020; Kelly et al., 2016; Santa-Clara and Valkanov, 2003). The timing, when higher risks and returns occur, remains unclear as well (Białkowski et al., 2008; Pantzalis et al., 2000). Moreover, the political orientation of the potential election winner seems to determine the stock market reaction before and after the election (Girardi, 2020; Leblang and Mukherjee, 2005).

In this study I aim to clear these inconsistencies by examining the timing and existence of changes in the volatility and returns around national election in European countries. In addition, I add new value to the discussion around the political orientation of the election winner and its influence on the stock market behaviour by investigating the new upcoming political trend of the FRPP.

3.3 Election effects on sustainability

As elections impact the regulatory and subvention politics, they bear crucial implications for the effort of companies and investors to mitigate climate change. [3]

In recent years companies and investors got confronted with concerns and new regulation about climate change and assessing the risk of it properly into their strategies and portfolios. Climate risks can be separated into two types of risks: physical and transition risks (Engle et al., 2020). Physical risk describes the risk of being affected by extreme weather events like flooding and drought. Transition risk displays the risk that more stringent climate regulation is implemented. If the

[3] Especially for institutional investors national election effects on the sustainable environment are important, as they prefer, according to the carbon home bias, high polluting, domestic stocks over foreign ones (Bolton et al., 2024). One reason for this behaviour might be the differences in the national climate regulations, which can be completely changed by the domestic election, explaining the relevance of national elections for these investors.

climate performance of a company is bad, it incorporates more risks to comply with costly, future regulation (Krueger et al., 2020). According to the theory, investors want to be compensated with a premium, which imposes more costs on the high-polluting companies (s. e.g., Hong and Kacperczyk, 2009). Thus, higher transition risk should cause higher returns for holding brown firms, while green firms reveal lower expected returns (Bolton et al., 2024). This effect exists mainly in the long run, as Bolton et al. (2024) doesn't find, that investors adjust their portfolios to short-term political changes.
However, in contrast to the theory green stocks outperformed brown ones in recent years. According to the framework by Pástor et al. (2021) [4], green stocks reveal higher returns and lower risks, when investor's concerns about climate change unexpectedly increase e.g., when the Paris agreement was confirmed. The higher likelihood of regulatory legislation and a change in consumers' and investors' preferences towards greener products, elevating the demand for those products and stocks, explain the green stock´s increase (Pástor et al., 2021).

In line with that argumentation, Seltzer et al. (2022) discuss that an election can affect green stocks negatively and brown ones positively, when the winner views climate change sceptical, influencing the public discourse about climate change and completely changing the regulatory landscape. After the presidential election of Donald Trump in 2016, brown firms show a significantly positive reaction (Ramelli et al., 2021), as institutional investors shifted their ownership from foreign to domestic brown firms (Bolton et al., 2024). Surprisingly, green stocks also experience an increase in stock market price. Ramelli et al. (2021) argue that green investors value future transition risks and expect a "boomerang effect" that the climate policy after Trump become even tighter than when Trump wasn't elected (Ramelli et al., 2021, p.25). Conversely, Antoniuk and Leirvik (2024) examined negative cross-sectional returns after the 2016 election, which could be partly explained by the overall shock of Trump being elected.

In summary, election outcomes can completely change the national perception of

[4]Empirical tests of the framework can be found in Ardia et al. (2023) and Monasterolo and de Angelis (2020).

climate change and the environment of sustainable companies. Theory suggests that higher transition risk should be translated into larger returns for brown companies and lower for green ones. Contradicting evidence is found in recent years, as increasing climate change concerns of investors rose the returns for green compared to brown companies. In addition, it remains unclear whether investors adjust their portfolios to short run political changes.

With this study I will focus on providing new evidence on these different directions in the literature by examining how investors value short term political changes in the transition risk and how this affects the stocks of green and brown firms after national elections.

4 Theoretical Framework

Based on the previous literature review, I will develop three, distinct hypotheses, which will be tested with the empirical strategy outlined in chapter 5.
In the first step I will examine the reaction of investor´s risks and returns to national elections in 16 European countries since 2008. Around the election day most studies agreed on a higher volatility, caused by political uncertainty (s. e.g., Pástor and Veronesi, 2012). Regarding the higher returns around elections, as a consequence of higher risks, the literature reveals contradictory results: either no or positive returns (Baker et al., 2016; Brogaard et al., 2020; Pástor and Veronesi, 2013; Santa-Clara and Valkanov, 2003). With the first hypothesis I will test, whether these effects will occur:

Hypothesis 1:
H0: National elections in European countries don't impact the returns and risks at national stock markets.
H1: National elections in European countries induce a risk increase and higher returns at national stock markets around the election day.

Using these results, I will in the next step examine whether these effects depend on the success of FRPP in national elections. The nationalist, anti-establishment claims and their implications threaten national economies and companies e.g., reduced international trade or exclusion of immigrated workers (Guriev and Papaioannou, 2022). The increasing share of FRPP in national parliaments or even their election into the government could have severe consequences for the national economy (Funke et al., 2023). As already mentioned in section 2, the FRPP success increases the political uncertainty, especially around elections. Thus, I expect that the volatility around the election day increases in line with the rising share of FRPP in national parliaments. This effect should be stronger when a FRPP wins the election, may join the government or has surprising success. According to Pástor and Veronesi (2012), higher volatility should result in higher returns, leading to the following hypothesis:

Hypothesis 2:

H0: The recent rise of FRPP doesn't impact returns and risks at national stock markets.

H1: The recent rise of FRPP strengthen the election effect on volatility and risk premium, causing higher risks and returns.

Finally, I will investigate if the stock market reaction differs for green and brown companies as a FRPP is elected into the government. FRPP don't support ambitions to mitigate climate change shifting the perception of sustainability and threatening sustainable companies (s. e.g., Ducbury, 2018; Hoekstra, 2023). They experience a worse investing climate, reduced political support and less stringent climate regulation. Around events like the election of a FRPP, when concerns about climate change arises, Pástor et al. (2021) examined green stocks to outperform brown. Supporting evidence is found by Ramelli et al. (2021): in expectation of more stringent climate regulation after the Trump legislature, investors valued greener companies higher after his election, as their long-term sustainable orientation hedges against this expected increase in transition risks. In contrast, theory indicates, that brown stocks outperform green ones in the long run, as a consequence of higher transition risks, and don't react to short run political changes Bolton et al. (2024). With the awareness of European investors for climate change in mind (Boermans et al., 2024), I expect, that investors react to the election of a FRPP into the government affecting volatility and returns of green and brown stocks differently.

Hypothesis 3:

H0: Green and brown companies don´t react differently to the election of a FRPP into the government.

H1: Green and brown companies react differently to the election of a FRPP into the government.

5 Empirical Strategy

5.1 Data collection and description

FRPP are becoming an influencing power in national parliaments since the economic crisis indicating the time horizon of this study from 2008 to 2024 (Noury and Roland, 2020). The data sample for this research contains the countries listed in a European MSCI country indices (MSCI, 2024c). In the following, this dataset will be changed, as I use different countries for each hypothesis. Figure 5 in the Appendix describes graphically each step of this data cleaning process.

A country´s electoral system can be divided into two groups: majoritarian and proportional. The classification was achieved using the work by Bormann and Golder (2013). In majoritarian election systems, the president is the head of state and in multiple rounds directly elected. In proportional election systems only the parliament is elected which then elects the head of state or president (Białkowski et al., 2008; Bormann and Golder, 2013). Results of these two distinct systems are difficult to compare. Therefore, the two European countries with a majoritarian election system are excluded from the sample (Czech Republic and France). Similarly, Greece is eliminated because of an unstable and highly volatile economic environment, which is induced by the monetary crisis around 2010. The effects on volatility make it difficult to perform a study based on historical data and isolate an election effect from political uncertainty.
Table 1 provides an overview about the remaining 16 countries electing in a proportional system and the 68 European elections used for the first hypothesis.

Country	Year	# of elections
Austria	2019 - 2008	4
Belgium	2019 - 2010	3
Denmark	2022 - 2011	4
Finland	2023 - 2011	4
Germany	2021 - 2009	4
Italy	2022 - 2008	4
Netherlands	2023 - 2010	5
Norway	2021 - 2009	4
Spain	2023 - 2008	7
Sweden	2022 - 2010	4
Portugal	2024 - 2009	6
Great Britain	2019 - 2010	4
Ireland	2020 - 2011	3
Hungary	2022 - 2010	4
Poland	2023 - 2011	4
Switzerland	2023 - 2011	4
Total		68

Table 1: Election sample

Regarding the second hypothesis, I reduce the sample to 11 countries and 49 elections. Countries are excluded because FRPP have been in power for several years (Switzerland, Poland and Hungary), thus an election of a FRPP wouldn't be a surprise in these countries. Great Britain and Ireland aren't part of the sample as there is no FRPP elected into the parliament since 2008. To determine the parties as FRPP, I used the Manifesto database (Lehman et al., 2024) and the definition of FRPP in the research by Zulianello (2020). Table 2 shows the FRPP in the parliaments of the 11 countries:

Country	FRPP
Austria	FPÖ
Belgium	VB
Denmark	Denmark Democrats & DPP
Finland	Finns
Germany	AFD
Italy	Brothers of Italy & Lega
Netherlands	PVV
Norway	Progress
Spain	Vox
Sweden	Sweden Democrats
Portugal	Chega

Table 2: FRPP in European Countries

To examine the effect of the FRPP and their recent success on the returns and the volatility, a data set containing the following independent variables is contructed:

- *share* measures the percentage share of FRPP voters in each election.
- Δ_{prev} captures the change in *share* compared to the previous election.
- *elecwin* (dummy variable) equals 1 when the election is won by a FRPP.
- *Surprise* (dummy variable) takes 1 if the FRPP result was a surprise and 0 otherwise. To determine, whether the FRPP results were surprising, two conditions have to be fulfilled (Lausegger, 2021): First, if the result of the FRPP differs from the average poll results over the three weeks prior to the election by about 3%. Secondly, if national newspapers claim the results to be "surprising".

In addition, multiple control variables, which are examined to have explanatory power regarding the stock market reaction to election by the literature, are included to control for confounding political and institutional effects:

- *ChangeInc* (dummy variable) shows 1 if a new government is elected (Goodell et al., 2020; Pantzalis et al., 2000).
- *MinGov* (dummy variable) is equal to 1 if the election results indicate a minority government (Białkowski et al., 2008).
- *Early* (dummy variable) is 1 when the election takes place earlier than the election cycle would determine (Białkowski et al., 2008).
- *marginvictory* (dummy variable) indicates if the difference between the election winner and the runner-up is larger than 3%. If this holds true, the variable equals 0 (Białkowski et al., 2008; Lausegger, 2021).

Table 3 provides descriptive statistics of all explanatory variables introduced above (a graphical overview is given in Figure 6 in the Appendix). Including all 49 elections, on average 11,79% of the voters voted for a FRPP. In some countries the FRPP weren't directly founded and electable after 2008 (e.g., Spain, Portugal and Germany). When excluding the elections where the FRPP has not

Variable	Mean	Standard deviation	Median	Min	Max
share	0.1179	0.0841	0.1232	0.0000	0.3477
Δ_{prev}	0.0239	0.0612	0.0082	-0.1234	0.1505
elecwin	0.0408	0.1999	0.0000	0.0000	1.0000
surprise	0.1778	0.3866	0.0000	0.0000	1.0000
ChangeInc	0.4347	0.5012	0.0000	0.0000	1.0000
MinGov	0.2826	0.4552	0.0000	0.0000	1.0000
Early	0.3673	0.4870	0.0000	0.0000	1.0000
marginvictory	0.2449	0.4345	0.0000	0.0000	1.0000

Table 3: Descriptive statistics

participated, the average share increases to 15%. Only including the last national election the FRPP accumulated on average 17,5%, which demonstrates that they become an established power in national parliaments. This is confirmed by the average gain in voters of 2,4% per election. When again only including the elections where a FRPP has participated, they increase their share by around 3% per election showing the strong trend towards the FRPP since 2008. Although FRPP were only in 4% of the elections able to attract the most votes, all cases happened in the last elections indicating that they recently managed to win elections and be part of a government (Netherlands, Italy & Sweden).

In almost one-fifth of the elections the polls haven´t predicted the success of FRPP correctly and it was publicly perceived as a surprising result.

The controlling variables show that in 43% of the elections the government changed afterwards and in 36% of the elections the election was called early. One-third of the elections resulted in a minority government commonly used in some European countries like Sweden and Norway (Rasch, 2011). Finally, the election race between the winner and the runner-up is in 25% of the elections a close call.

The sample for the final hypothesis includes the three countries from table 2 where a FRPP was elected to be part of the government in the last election: Netherlands, Sweden and Italy.

In order to test if the effect differs for (un-)sustainable companies, I use two different metrics to determine whether a company is green or brown:

MSCI provides for companies listed in their indices an environmental, social and

governance (ESG)-rating score, which measures how a company manages its most material ESG risks and opportunities in general and in relation to its peers. The rating assesses the 35 key issues for each company and how their core business model is related to the industry-specific issues. The issues are weighted according to their impact and time horizon (MSCI, 2024b). The rating ranges from AAA and AA (leaders) to A, BBB and BB (average) to CC and CCC (laggard) (MSCI, 2024d). By assigning each rating category a number, I transform the MSCI-rating into a quantitative variable (Seltzer et al., 2022). Thus, it starts with CCC equal to 1 and ends with AAA equal to 7. The company-level MSCI scores are obtained from their website (MSCI, 2024a).

As there are various concerns about the comparability and trustworthiness of ESG ratings (s. e.g., Dimson et al., 2020), I will also use total carbon emissions as a more objective measurement (s. e.g., Ardia et al., 2023; Seltzer et al., 2022). Carbon emissions are divided into scope 1, 2 and 3. Scope 1 include all direct emissions produced by the firms. Scope 2 are all indirect emissions coming from the generation of purchased energy. Scope 3 display all emissions generated in the companies' value chain (EPA, 2020). In the following, I will focus only on Scope 1 emissions, as they are directly controlled by the firm and reported with the highest accuracy (Seltzer et al., 2022). The emissions data measured as CO_2 equivalent in tonnes is retrieved from the Refinitiv Eikon Database and filled up with the company-specific disclosure where the database provides no value. To avoid possible issues arising from skewness in the data, I use the logarithm of the emissions and the intensity in the regressions. An overview about how the companies score on both, the MSCI and emission-measurement, is described with the Table 10 in the appendix.
To test the third hypothesis, the MSCI Rating and carbon emissions are added in the regression using the following explanatory variables:

- *MSCI* indicates the environmental performance proxied by the MSCI Rating, ranging from 1 to 7, (Seltzer et al., 2022).
- *emissions* measures the logged absolute Scope 1 carbon emissions (Ardia et al., 2023; Seltzer et al., 2022).

- *Intensity* measures the logged relative Scope 1 carbon emissions divided by the market capitalisation of the company.

Finally, this study compares, how the return and volatility effect differs between green and brown companies. For this purpose, *Greendummy* is introduced, which splits the sample of hypothesis 3 into two groups according to their environmental performance measured by the relative emission intensity:

- *Greendummy* (dummy variable) turns 1 if the company is in the upper half or above the mean regarding their emissions intensity. If they are ranked below, it is 0.

To examine the reaction of national stock markets to the election results, I use the companies listed in related European MSCI country indices, which are value weighted and dividend adjusted indices covering 85% of the local stock market (e.g., MSCI, 2024d). Because of the high correlation, MSCI indices are commonly used in cross-country event studies as a proxy for national stock markets (Białkowski et al., 2008; Pantzalis et al., 2000). The MSCI Europe index serves as a proxy for an European portfolio. The daily stock market data of the indices and companies is retrieved from Factset and the Refinitiv Eikon Database. An overview about the MSCI country indices is provided in Table 10 in the Appendix. The data about the elections, including poll and official results, are taken from the Manifesto and Politico database (Lehman et al., 2024; Politico, 2024) and verified by official, governmental election websites and newspaper articles (s. e.g., Dyvik, 2024; Pascoe, 2023; The Federal Returning Officer, 2024).

5.2 Data analysis

In the first step, the election effect on national stock markets is examined employing an event-study methodology to determine returns and volatility. Secondly, the results are further regressed in a cross-sectional design on the introduced explanatory variables.

An event study is generally utilised to compare actual returns or volatility, caused by the market reaction to the event, with normal returns/volatility, the hypothetical market development when no event occurred (Brown and Warner, 1985;

Peterson, 1989).

In this research the observed events are national elections, where the actual voting day is the event day (t=0). Often elections are scheduled on weekends, where the stock market is closed. In this case, the first day, when the stock market opens again, is used as the event day. I define the main event windows to be (-10,10), starting ten days before and ending 10 days after the election. To isolate the effect after the election multiple other event windows are used: (-2,2) and (-5,5). To examine if the effect stays persistent over the whole event period, the event window (-15,15) is included.

5.2.1 Returns

Normal returns are predicted based on a 250 days estimation window ranging from -265 to -15 days prior to the elections, which is commonly used in the literature (Brown and Warner, 1985; Corrado, 2011). To avoid an effect of the election on the estimation window, it ends with a half month distance.

The main model to predict normal returns is a single factor model, which is commonly used in stock market and multi-country event studies (Campbell et al., 2010; Fama et al., 1969; Pantzalis et al., 2000)[5]. I define the abnormal returns $A_{i,t,e}$ as:

$$A_{i,t,e} = (r_{i,t,e} - rf_t) - (\alpha_i + \beta_i * (R_{m,t,e} - rf_t)) + u_{i,t,e} \quad (1)$$

where $r_{i,t,e}$ is the return of company i on day t in election e and $R_{m,t,e}$ the return of a market portfolio, the MSCI Europe. rf_t describes the risk free rate on day t. The ordinary least squared (OLS) estimation computes the market model parameters α and β. $u_{i,t,e}$ is the firm-specific return, which is unrelated to the overall stock market, thus in expectation equal to 0 (Corrado, 2011).

To examine the effect over multiple days and companies for each election e, the abnormal returns are in the first step cumulated over the event window (t_1,t_2) to arrive at the cumulative abnormal returns (CAR) for each company i (s. e.g.,

[5]As the 3 and 5 factor Fama-French models focus on calculating the long-term expected returns rather than the short-term ones, I don't use these models for predicting the normal returns (Fama and French, 2016).

Campbell et al., 2010):

$$CAR_{i,e}(t_1, t_2) = \sum_{t=t_1}^{t_2} A_{i,t,e} \tag{2}$$

Secondly, the obtained $CAR_{i,e}$ are averaged for each national election to calculate the cumulative average abnormal returns (CAAR) (s. e.g., Campbell et al., 2010):

$$CAAR_e(t_1, t_2) = \frac{1}{N} * \sum_{i=1}^{N} CAR_{i,e}(t_1, t_2) \tag{3}$$

To derive an overall effect spanning all events, the $CAARs$ are averaged over all elections calculating the overall return (OR):

$$OR = \frac{1}{E} * \sum_{e=1}^{E} CAAR_e(t_1, t_2) \tag{4}$$

To determine the significance of the $CARs$, $CAARs$ and OR, the results are tested with the parametric test proposed by Boehmer et al. (1991) (in the following BMP). The BMP-test assumes that the returns over all events are independent, which improves his power in comparison to a normal t-test (Brown and Warner, 1985). In addition, it accounts for event-induced higher volatility around the event day, which could affect the coefficient tests (Boehmer et al., 1991). Parametric tests assume that the probability distribution of the test-statistics under the null hypothesis is normally distributed. As this assumption doesn't often hold for financial data, I apply as well the non-parametric, generalised rank test by Corrado and Zivney (1992), which is examined to be appropriate for cross-sectional event studies (Campbell et al., 2010).

5.2.2 Volatility

Instead of using a single factor model, normal volatility is predicted with a generalised autoregressive conditional heteroskedasticity (GARCH) model. In the following, I will use the GARCH(1,1) model invented by Bollerslev (1986):

$$v_{i,t} = \lambda_0 + \lambda_1 * v_{i,t-1} + \lambda_2 * \epsilon_{i,t-1} \tag{5}$$

where $v_{i,t}$ is the volatility of the stock of company i on day t and $v_{i,t-1}$ the one day lagged $(t-1)$ volatility weighted by λ_1. $\epsilon_{i,t-1}$ denotes the security return on the previous day and λ_2 its weight. λ_0 describes the long run average volatility of the stock i. The GARCH(1,1) model in Equation 5 determines the volatility by its most recent historical development depending on its trend, the long run volatility and the lagged change in the underlying stock price (Engle, 1982; Hull, 2015). Thus, the one-day lagged prediction of the volatility is only unbiased by the election, when it is based on the information available prior to the election (for theoretical explanations: Białkowski et al., 2008).

To calculate $v_{i,t}$ the coefficients $\lambda_{0,1,2}$ are estimated with the maximum likelihood method based on historical data of security i. Therefore, I use the recent 500 trading days to get the most accurate estimators (Hwang and Valls Pereira, 2006).

To compute the cumulative average abnormal volatility (CAAV), the index-level framework by Białkowski et al. (2008) is used and further developed so that it can be applied to a company level analysis. Equation 6 displays the daily multiplicative effect of a election on the volatility for each country:

$$M_{c,t} = \frac{1}{N-1} * \sum_{i=1}^{I} \frac{(\epsilon_{i,t} * N - \sum_{i=1}^{I} \epsilon_{i,t})^2}{N * (N-2) * v_{i,t} + \sum_{i=1}^{I} v_{i,t}} \tag{6}$$

where $M_{c,t}$ is the multiplier, describing the difference between normal and abnormal volatility for country c on day t. $\epsilon_{i,t}$ denotes the return of company i on day t and $v_{i,t}$ its variance calculated based on Equation 5. The $\sum_{i=1}^{I}$ describes the summation over all companies. N represents the country specific number of elections in the sample.

Similar to Equation 2 and Equation 3 the Multiplier is, in line with Białkowski et al. (2008), at first cumulated over the event window t_1,t_2:

$$CAV_c(t_1, t_2) = (\sum_{t=t_1}^{t_2} M_{c,t}) - (t_1 - t_2 + 1) \tag{7}$$

Finally, the $CAAV$ are derived by averaging the CAV_c over all countries:

$$CAAV(t_1, t_2) = \frac{1}{N} * \sum_{c=1}^{N} CAV_c(t_1, t_2) \tag{8}$$

The significance of the $CAAV$ is tested using the standardised, parametric t-test. Non-normality, autocorrelation and cross-correlation could decrease the robustness of the t-tests, thus a bootstrap test by Efron (1979) is applied, accounting for these issues.

5.2.3 Regression

The $CAARs$ and $CAVs$ are in a second step regressed in a cross-sectional regression on the explanatory variables from Table 3:

$$C = \alpha + \beta_1 * share + \beta_2 * \Delta_{prev} + \beta_3 * elecwin + \beta_4 * surpr + \gamma * control + u_{i,t} \quad (9)$$

where C reflects the CAARs for the returns. For the volatility C represents the natural logarithm of the obtained CAVs(-10,10) divided by the volatility of a pre-event window with similar length (-45,-25) to increase the validity of the t-statistics in the regression (Białkowski et al., 2008). *share* displays the voting share of FRPP in each election and Δ_{prev} the change in *share* compared to the previous election. *elecwin* and *surpr* are dummy variables indicating if the FRPP wins the election and if their success was perceived as a surprise. *control* represents the control variables found by the literature from Table 3 and $u_{i,t}$ the error term. For the third hypothesis, the variables $MSCI$, $emissions$,$Intensity$ and $Greendummy$ are included separately (e.g., in Equation 10 for $MSCI$), explaining the sustainable performance of a company. $MarketCap$ is additionally included with *emissions* and $MSCI$ to control for the firm size:

$$C = \alpha + \beta_5 * MSCI + \beta_6 * MarketCap + u_{i,t} \quad (10)$$

The regressions are estimated with the OLS method, which produces unbiased coefficient estimates in cross-sectional regression using event study outcomes (Białkowski et al., 2008; Pantzalis et al., 2000).

As the regression includes different firms having the same national election day, the variance of the standard errors differs, leading to cross-sectional heteroscedasticity (Sefcik and Thompson, 1986). To control for this issue, the Newey and West (1987) standard error correction is applied, which solves the standard error bias

of the coefficient and also corrects for any autocorrelation problems.

5.3 Robustness

In the following, I will introduce several adjustments of my data and methodology to confirm the robustness of my results.

The cross-sectional regression for hypothesis 2 and 3 is only performed for countries, where FRPP are an upcoming, new trend. The effect on the stock market should be diminished using the countries, where the FRPP is in power for several years, as a placebo (s. e.g., Girardi, 2020). Around the elections from Hungary, Poland and Switzerland, I expect that the potential stock market effect observed with the original dataset doesn't occur, thus the null hypothesis cannot be rejected.
In addition, random event days, way before and after the election, are tested. Similar to the placebo, I expect, that the null hypothesis cannot be rejected, as there shouldn't exist any significant effect (Girardi, 2020).

When performing the event study the market model[6] as an another model, additional asymmetric event windows (e.g., (-2,0); (-5,0)) and the sign test by Corrado and Zivney (1992) as an additional test are executed. Under all extensions, I expect the original results to be confirmed. In addition, the event study is repeated only including the country level MSCI index instead of each company. Since the index reflects the overall national development, this should confirm the results. Differences in the coefficients could arise from the weightings, as I equally weight the countries, while the MSCI is value weighted. Additionally, using the indices instead of the companies would account for a possible cross-correlation, occurring when multiple companies have the same event day (s. e.g., Sefcik and Thompson, 1986).
All MSCI country indices are denominated in US Dollar, thus it is arguable, that the returns and the volatility can be partly explained by the change in the foreign

[6]Market model describes a model with one slope coefficient and in comparison to the single factor model, without considering the risk free rate. The market model formula: $A_{i,t,e} = r_{i,t,e} - (\beta_i * R_{m,t,e}) + u_{i,t,e}$.

currency (Białkowski et al., 2008). Data on foreign exchange rates is collected for all countries to justify that returns and volatility are uncorrelated to the national currencies. In addition, next to the abnormal returns the book-to-market ratio is established as an alternative measurement of the economic development of a firm around an event. To control the robustness of my results I will test for the significant differences in the results of the event study as well as the ones of the regression, when using the book-to-market ratio and the returns. The data for this purpose is obtained from Refinitiv Eikon.

Finally, the last hypothesis includes the variable *emissions* measuring the Scope 1 emissions of a company. For robustness the regression is also computed when the variable includes Scope 1 and 2 emissions and when it is divided by the market capitalisation of the firm, describing the emission intensity. In addition, a dummy variable *country* is included in the last regression controlling for each of the three countries to avoid that the effect on sustainability is driven by the election and not by country specific factors.

6 Results

This chapter presents the results of the data analysis, described in section 5. Each of the following subsections examines one of the three hypotheses by explaining the volatility results first and concluding with the return outcomes.

6.1 Election effects on stock markets

Around general, national elections in European countries I find a positive, significant increase in the volatility and returns starting around ten days before the election. In contrast to the returns, which decrease after the election, the volatility stays on that level for some days after the event. Using an event study methodology to derive both, the cumulative average abnormal returns (CAAR) and the cumulative average abnormal volatility (CAAV), several robustness checks are additionally performed and introduced in appendix D and E.

Table 4 and Figure 1 report the results for the volatility in four different event windows using the whole sample of 16 European countries and 66 elections.

The graph in Figure 1 clearly envisions that on average the volatility increases during the election period. As the literature suggested, the higher political uncertainty is translated into uncertainty, thus volatility at the stock markets (Pástor and Veronesi, 2012).

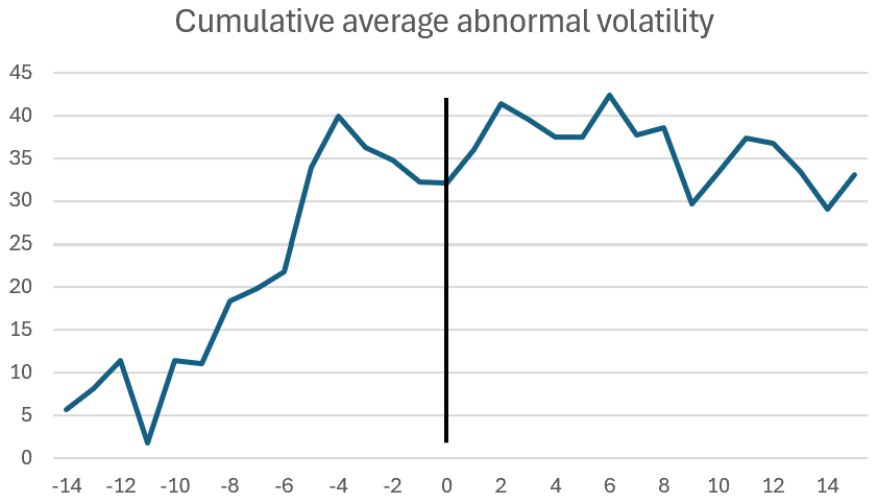

Figure 1: Cumulative average abnormal volatility graph using the single companies.

Similar to the graph of Białkowski et al. (2008), the volatility increases and stays on that high level some days after the election. The counting process of all votes until the official results are published and the uncertainty about the future government and coalition negotiations, could explain why the volatility endures on the higher level (Białkowski et al., 2008). Only the timing of the rise of the volatility differs, as it starts already ten to six days before the election indicating that the political uncertainty already increases prior to the election.

event windows	CAAV(t_1, t_2)	Volatility change	p-value	bootstrap p-value
(-10,10)	18.3854**	87.5495%	0.0222	0.0453
(-5,5)	12.6289*	114.8079%	0.0706	0.0923
(-2,2)	3.2215	64.4293%	0.2113	0.3654
(-15,15)	33.5415**	108.1983%	0.0128	0.0224

Table 4: Overall volatility results using the single companies. The p-values of a parametric t-test and the bootstrap p-values are given. *, ** and *** represent the significance level of 10%, 5% and 1% based on the t-test.

In the event window fifteen days around the elections the CAAV takes on average a value of 33.54, which is significant on the 5% significance level using a parametric t-test and the bootstrap method by Efron (1979) (s. Table 4). By dividing through the total number of days in the event window, the percentage change of the volatility during that time span can be determined. Thus, the volatility increased very significantly by 108.20% in the thirty days around the event compared to the counterfactual, that no election took place. For the event windows ten and five days around the event this positive effect holds as well indicating a 87.55% and 114.81% higher volatility, which underlines the strong positive volatility reaction at national stock markets. Irrespective of the testing method both CAAVs are significant (the CAAV(-10,10) on the 5% significance level and the CAAV(-5,5) on the 10%). The magnitude of the results are confirmed by the study of Białkowski et al. (2008), as their findings reveal similar outcomes in size and sign around national elections e.g., in their (-2,2) window the volatility increases by 107%. In contrast to Białkowski et al. (2008), the CAAVs two days around the election are insignificant, as the volatility already rises six days before the election.

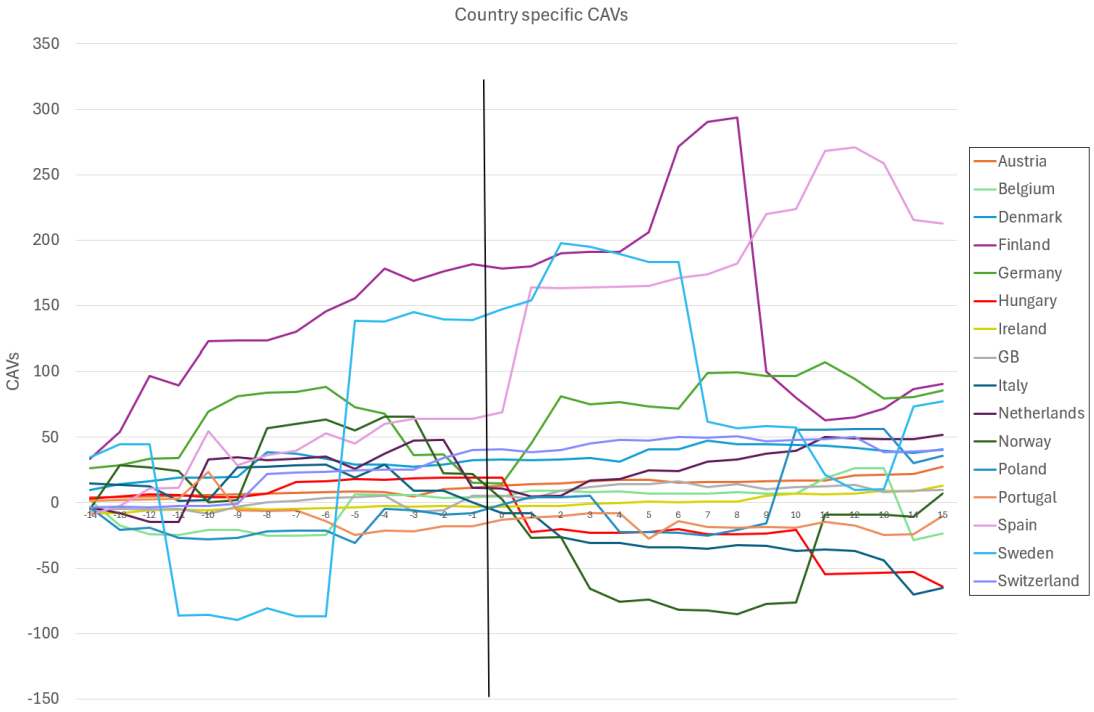

Figure 2: Country specific CAVs.

The country specific volatility response of the stock markets to national elections is displayed graphically by Figure 2 (for exact values s. Table 15 in appendix F). Differences between the countries arise in magnitude and sign e.g., Sweden's volatility increases dramatically (around 300% depending on the event window) in reaction to the election, while the effect in Portugal is fairly muted (0.94% in the (-10,10) event window). But in most of the countries the volatility grows during the election period confirming the overall volatility results reported above.

In summary, the obtained results verify in line with the research (e.g., by Białkowski et al. (2008), Pástor and Veronesi (2012) and Baker et al. (2016)) that the volatility jumps up significantly around national elections in European countries. This effect is robust, as random event days way before and after the true event day deliver just insignificant results. In addition, the results are justified by multiple testing methods, with asymmetric event windows, changed local currencies and when the MSCI country indices are used (s. Table 11 in appendix D). The small differences between the results of the MSCI indices and the single companies approach are coming from the value weighting of the MSCI indices, while the latter one is equally weighted.

Based on the theoretical framework by Pástor and Veronesi (2012), the higher volatility and uncertainty around elections should be translated into increased returns, as investors get compensated for taking the higher risks. Table 5 and Figure 3 describe the return results using the single companies in the single factor model.

	Model	(-10,10)	(-5,5)	(-2,2)	(-15,15)
Overall (SFM)	Companies	0.8687%*	0.0776%	-0.0016%	0.3634%
		(0.0976)	(0.8348)	(0.9961)	(0.6075)
	MSCI	-0.0532%	-0.2443%	-0.1638%	-0.3594%
		(0.9204)	(0.4907)	(0.6232)	(0.6217)
Random event days	Companies	0.0265%	0.0104%	0.0028%	0.1708%
		(0.4037)	(0.4077)	(0.5375)	(0.5863)
	MSCI	0.0449%	0.0242%	0.0405%	0.2355%
		(0.4490)	(0.5135)	(0.3767)	(0.4567)

Table 5: Overall return results based on the single factor model (SFM) and random event days using the single companies and the MSCI country indices. The p-values of the parametric test by Boehmer et al. (1991) are given in brackets below. *, ** and *** represent the significance level of 10%, 5% and 1%.

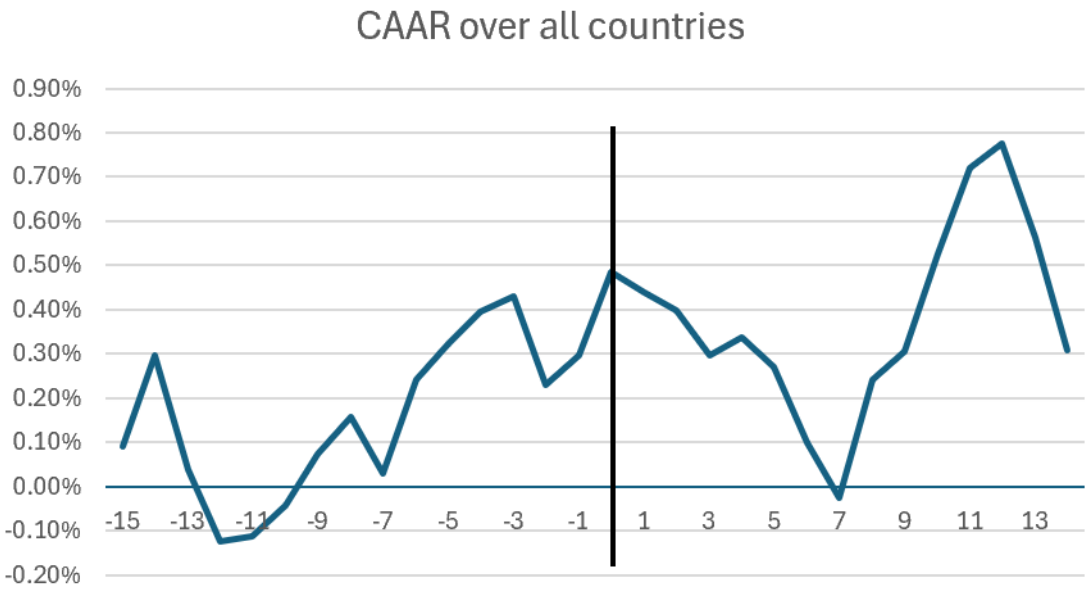

Figure 3: Overall returns

Only the return in the (-10,10) event window is positive and on the 10% level significant. During that time span investor's return is on average 0.87% higher than it would be, when no election occurred. The size of the return effect is similar

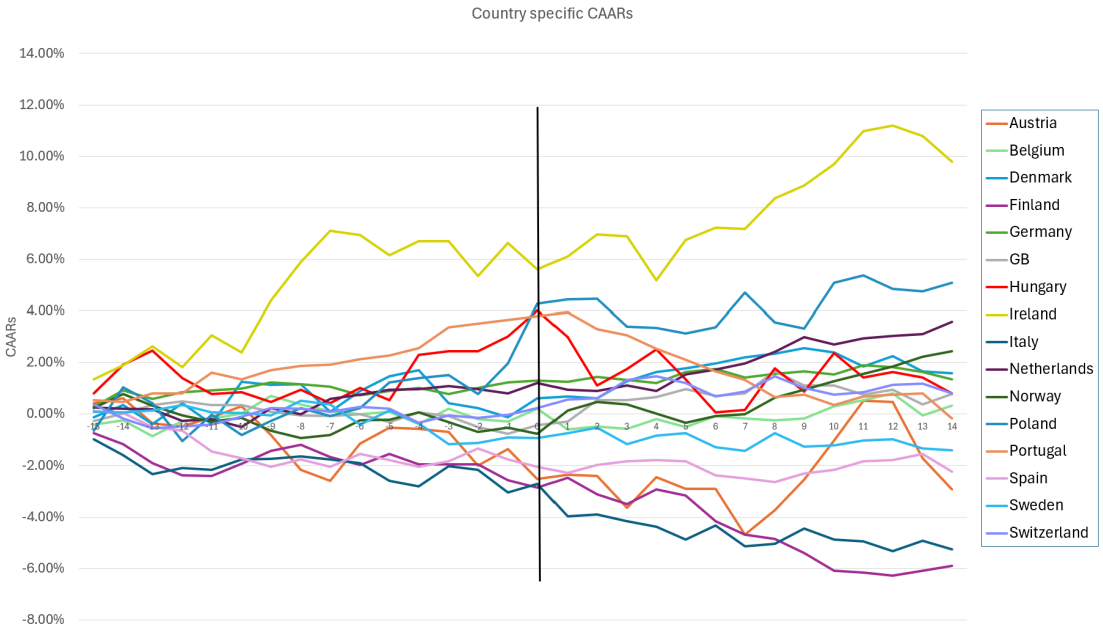

Figure 4: Country specific CAARs based on the single factor model including the single companies.

to the findings by Białkowski et al. (2008), while Pantzalis et al. (2000) indicate a larger and more significant return compensation of over 1% for investors. Figure 3 supports graphically that national elections induce positive returns starting around 12 days prior to the event. When comparing Figure 3 and Figure 1, the rise in returns seems to occur parallel to the increase in the volatility. It is approved by the Pearson correlation coefficient of 0.83 in the event window (-10,0) confirming the framework by Pástor and Veronesi (2012) (s. Table 14). After the event the daily returns turn negative and the CAARs decrease. The uncertainty remains on the high level, but is decoupled from the returns, as seen in both graphs and the correlation coefficient (s. Figure 3, Figure 1 and Table 14). Thus, after the election, the increased uncertainty doesn't cause a compensation for investors anymore.

Ten to twelve days after the event, the returns jump up again. In Figure 4 it can be seen that this effect is mainly driven by Ireland and Portugal, while the other countries reveal steady returns during that time span. The rise could be explained by e.g., negotiations between parties to form a coalition causing uncertainty about the future government, which yields some additional returns.

When examining the country specific election response, the CAARs in only six out of sixteen countries are negative over the whole time (s. Figure 4). But

between the countries the magnitude and sign of the returns differ significantly indicating country specific factors driving the returns (around 9% in Ireland to -6% in Finland). In addition, when changing the included countries in the sample, the positive abnormal returns appear to be heavily country-dependent: when only the countries from hypothesis 2 are used[7], the election effect on returns in the -10,10 event window becomes insignificant and reduces to 0.0029% (s. Figure 7).

To conclude, national stock markets seem to react to the political uncertainty before domestic elections with small, but significant positive returns. Similar results are obtained, when using the market model[8] (s. Table 12). Additionally, changing the currencies and using the book-to-market ratio doesn't reveal differences in the results, indicating robust results.
Contradicting evidence is obtained with another testing method by Corrado and Zivney (1992) rejecting the results from the parametric t-test (s. Table 13). The MSCI country indices reveal also insignificant return outcomes, which might be driven by the different weighting techniques. Furthermore, the robustness of the overall positive returns only holds for certain countries, as the return reaction depends on the countries included in the sample.
In total, I can reject the first hypothesis for the volatility results, as national elections in European countries cause a significant, positive and robust increase in volatility, thus risks. As a consequence investors should theoretically be compensated with positive returns (Baker et al., 2016; Kelly et al., 2016; Pantzalis et al., 2000; Pástor and Veronesi, 2012). This holds true for the 16 countries included in the whole sample, thus the first hypothesis can be rejected. The increasing trend in volatility and returns starts around ten days before the election event, as political uncertainty starts to rise leading up to the election. But whether positive and significant returns occur in general, depends on the countries included in the sample.

[7]In comparison to hypothesis one, Ireland and Great Britain are omitted, because they don't have a FRPP in the parliament. In addition, Poland, Hungary and Switzerland are eliminated, as FRPP are in power for several years.

[8]Market model describes a model with one slope coefficient and in comparison to the single factor model, without considering the risk free rate. The market model formula: $A_{i,t,e} = r_{i,t,e} - (\beta_i * R_{m,t,e}) + u_{i,t,e}$.

6.2 FRPP election effect

The following chapter provides an overview about the results for the second hypothesis dealing with the effect of the FRPP on national elections in European countries. Overall, the results are obtained in a cross-sectional regression analysis with multiple independent variables explaining the success of the FRPP and other factors describing the election.

As *Share* describes the relative amount of votes and Δ_{prev} the margin of share to the previous election, these variables are highly correlated. Thus, both variables aren't included in the same regression to avoid multicollinearity issues. In the appendices I and J multiple other regressions are performed to test for the robustness of the results.

The regression outcomes of the volatility ratio on the explanatory variables are outlined in Table 6, which provides evidence that the volatility is affected significantly by the recent election success of the FRPP. When the FRPP gained more than 5% compared to the previous election, the volatility increases by around 9%. It holds as well for the *Share* of voters selecting a FRPP, as an increase in the amount of votes rises the volatility. Both effects on *Share* and Δ_{prev} are robust over multiple regression (1-5) and in longer time windows. This doesn't hold, when using the MSCI volatility results, which could be explained by the different weighting mechanisms (s. regressions 6-9 in Table 18).
The other variables describing the election success of the FRPP, *Surprise* and *elecwin*, remain insignificant. In contrast to Białkowski et al. (2008) all explanatory variables about the election fail to achieve significance as well.
In summary, the increasing recent success of the FRPP in Europe increased the volatility around national elections. FRPP with their radical ideology seem to cause more political uncertainty and accelerate the increase in volatility around national elections. When, under the theoretical framework by Pástor and Veronesi (2012), the FRPP cause more uncertainty, they should induce also higher returns.

Table 7 demonstrate that the returns are also affected by the FRPP election suc-

Variable	exp. sign	(1)	(2)	(3)	(4)	(5)
Constant	?	2.5434	12.0589	-52.8794	6.2966	-59.2713
		(0.9898)	(0.9475)	(0.7466)	(0.9734)	(0.7377)
Year	?	-0.0015	-0.0062	0.0262	-0.0022	0.3032
		(0.9871)	(0.3353)	(0.7475)	(0.9800)	(0.7319)
Share	+			7.7345*		8.1892*
				(0.0740)		(0.0950)
elecwin	+	-1.3132	-1.6326	-2.8193	-2.4739	-3.3372
		(0.2012)	(0.3352)	(0.1740)	(0.2633)	(0.2394)
Δ_{prev}	+	2.0479**	1.8261**		1.9833**	
		(0.0204)	(0.0322)		(0.0294)	
Surprise	+		1.1788	1.3693	1.1644	1.3376
			(0.6783)	(0.6161)	(0.6980)	(0.6498)
ChangeInc	+				-0.6618	-0.6423
					(0.5717)	(0.5929)
MinGov	+				-0.1247	-0.1284
					(0.9328)	(0.9312)
Early	+				-0.9221	-0.8520
					(0.3558)	(0.3786)
marginvictory	+				-1.7947	-1.4463
					(0.2034)	(0.3245)
Adj. R^2		0.0049	0.0146	0.0121	0.0894	0.0753
Degrees of freedom		45	44	44	40	40

Table 6: Cross sectional regression results using the election and country specific volatility ratio (-10,10) including the single companies. Each of the variable is also included separately, but this doesn't alter the results. The number of observations equals 49 for all regressions. In brackets under the variable coefficients, the related p-value is given. *, ** and *** represent the significance level of 10%, 5% and 1%.

cess[9]. When a FRPP wins the election, this leads to an average, highly significant increase in returns by 4-10% depending on the included variables. The effect is robust, as it stays significant, when the data from the market model is used as the dependent variable and even accelerated in the longer event window.

From the election specific variables only the difference from the runner-up to the election winner is significant through all regression confirming the results of Białkowski et al. (2008). When the election race is a close call, the uncertainty increases leading to around 5% larger returns. Similar to the volatility regression, the other variables describing the election appear to be insignificant.

[9]I find some evidence that a surprising election success of a FRPP drives the returns around national elections. When the FRPP success was perceived by polls and media as unexpected, returns are on average around 2% higher. This effect is significant, but loses its power in some of the robustness checks (s. regressions 6-9 in Table 20).

Variable	exp. sign	(1)	(2)	(3)	(4)	(5)
Constant	?	0.2382	-0.1759	0.4518	-0.0443	0.7219
		(0.9489)	(0.9650)	(0.9011)	(0.9846)	(0.8431)
Year	?	-0.0001	0.0000	-0.0002	-0.0005	-0.0004
		(0.9834)	(0.9925)	(0.7523)	(0.8355)	(0.6812)
Share	+	-0.0894		-0.0996	-0.1250	-0.1183
		(0.2040)		(0.3040)	(0.1873)	(0.3081)
elecwin	+	0.0509***	0.0378***	0.0487***	0.1055***	0.1087***
		(0.0010)	(0.0000)	(0.0050)	(0.0000)	(0.0000)
Δ_{prev}	+		-0.0164			
			(0.3401)			
Surprise	+			0.0256**	0.0244*	0.0234*
				(0.0463)	(0.0632)	(0.0890)
ChangeInc	+					-0.0035
						(0.8090)
MinGov	+					0.0097
						(0.4180)
Early	+					-0.0163
						(0.3360)
marginvictory	+				0.0547***	0.0431***
					(0.0000)	(0.0038)
Adj. R^2		0.0586	0.0595	0.0832	0.1089	0.1646
Degrees of freedom		45	45	44	40	40

Table 7: Cross sectional regression results using the CAARs (-10,10) from the single factor model including the single companies. Each of the variable is also included separately, but this doesn't alter the results. The number of observations equals 49 for all regressions. In brackets under the variable coefficients, the related p-value is given. *, ** and *** represent the significance level of 1%, 5% and 10%.

To conclude, stock market returns around national elections in European countries are affected positively by the FRPP, when they win and when their success is underestimated. But as *elecwin* takes in only 4% of the elections the value of 1, the reliability of the results could be diminished as the sample of election wins is too small.

As a placebo, the same regressions for volatility and returns are performed in the countries, where the FRPP is in power for several years, checking for the robustness of the results. The results are provided in Table 19 and Table 21. In comparison to the sample of the H2 regressions, the stock market in these countries shouldn't react to FRPP elections. When looking at the volatility

and the return regression, again the amount of votes and if the FRPP wins the election is significant, but, the sign changed, as both coefficients are negative. In contrast to the findings, when a FRPP is a new, upcoming participant, an already established FRPP decreases the volatility reaction around general elections. As a consequence, in line with the framework by Pástor and Veronesi (2012), the returns at stock markets are reduced in the case of a election win.
In total, FRPP influence the stock market by having significant positive influence on returns as well as the volatility. Although the regressions reveal different significant variables, describing the FRPP success, the upcoming FRPP seem to generate political uncertainty around general elections affecting the behaviour of stock market participants. Thus, I can reject the second hypothesis for both, returns and volatility.

6.3 FRPP election effects on sustainability

The final section explains the stock market behaviour of green and brown firms, when a FRPP is elected into the government and part of the ruling parties. For this purpose, a company-level cross-sectional regression is performed using the recent elections in Sweden, Netherlands and Italy. The dependent variables are the CAARs (-10,10) and the volatility ratio (-10,10). To derive, if a company is brown or green, I use multiple sustainability measurements as the explanatory variable: the MSCI ESG score, the absolute emissions and the relative emissions intensity. As there are concerns about the skewness in the data of emissions, intensity and market capitalisation, the logarithm of these variables are used. Multiple robustness checks are calculated and presented in Table 22 to Table 25.

The results for the volatility are displayed in Table 8 indicating that the sustainable performance of a company has no explanatory power for its volatility around the elections, when a FRPP is elected into the government. All independent variables reveal insignificant results, except from *Greendummy*. When the companies are separated into two groups in terms of their emissions, the greener group experiences a 18% lower volatility in comparison to the brown group. This effect is significant and robust, when using the emission intensity instead of the

Variable	exp. sign	(1)	(2)	(3)	(4)	(5)	(6)
Constant	?	-12.6264	-14.6851	-9.2028	-26.9292	-26.8917	2.3411
		(0.1265)	(0.5253)	(0.2596)	(0.4982)	(0.5278)	(0.3210)
emissions	?	1.3845			0.8402		
		(0.3798)			(0.5856)		
MSCI	?		1.4507			-0.3052	
			(0.7301)			(0.9423)	
Intensity	?			5.9403			
				(0.7490)			
MarketCap	+				25.2203*	25.6941*	
					(0.0553)	(0.0600)	
Greendummy	?						-3.8158**
							(0.0411)
Adj. R^2		0.0011	0.0013	0.0017	0.0246	0.0239	0.0167
Degrees of freedom		82	82	82	81	81	82

Table 8: Cross sectional regression results using the company level volatility ratio (-10,10) as dependent variable. To avoid skewness issues, the logarithm of the variables *emissions*, *Intensity* and $MarketCap$ are used. The number of observations equals 84 for all regressions. In brackets under the variable coefficients, the related p-value is given. *, ** and *** represent the significance level of 1%, 5% and 10%.

absolute emissions. When they are elected into the government for the first time, it is unclear how they address current climate change efforts, how they deal with e.g., emission reduction laws and how fast high polluters have to transform to greener companies. All this political uncertainty about the transition risks and the increase in climate change concerns of investors, is translated to the stock market causing increased uncertainty for browner firms in comparison to greener ones (Pástor and Veronesi, 2012).

From the regression only a larger company size, measured by the market capitalisation, leads to a 25% increase in volatility, when a FRPP is elected into the government (Table 8. Multiple reasons are possible for this effect, one might be: As FRPP put the emphasis on domestic markets and see globalisation efforts critically, they affect larger companies with global market power and supply chains. Investors could expect that these companies lose their access to e.g., international trade, causing the higher volatility around the election of a FRPP government. This effect is significant, but loses its explanatory power in the robustness checks (s. Table 22 and Table 23).

In summary, FRPP's election into the government create political uncertainty about future climate and global trade regulation. It affects the behaviour of stock markets participants as high-polluting and large companies experience an increase in volatility in comparison to the greener and smaller companies.

For the returns the results of the regression with the CAARs as the dependent variable are given in Table 9. It shows that higher absolute pollution reduces significantly the returns, when a FRPP is elected into the government. Each ton in emissions more causes a 0.016% lower return. When dividing by the company size, controlling for the country or using longer event windows, this effect remains significant across all robustness checks (s. Table 24 and Table 25). In addition, when the companies are as above split into the two groups, the greener group averages a significant and robust 5.1% higher return[10].

In contrast to Bolton et al. (2024), green and brown stocks react differently to the short term political implications of an election indicating higher returns for green firms. The increase in volatility, thus risk, for browner firms isn't translated into larger returns. Instead the greener firms experience higher returns, although the FRPP government dislikes supporting climate mitigation and adaption efforts causing concerns about the climate change. These findings are also evidence against the framework by Bolton et al. (2024) and the argumentation by Seltzer et al. (2022).

In this case, in line with Pástor et al. (2021), green stocks experience higher returns and lower risks around events, when investor's climate change concerns arise, like the election of a FRPP government. In addition, it supports the boomerang theory by Ramelli et al. (2021), that stock market participants estimate the climate change regulation to be even tighter after the legislature of the FRPP. Thus, they value the green orientation of companies leading to increased returns of greener companies.

In summary, the national stock markets react around the election of FRPP into

[10]Comparing to the American stock market reaction after the trump election in 2016, similar results for green firms are found, but in contrast brown industries reveal significant returns as well (Ramelli et al., 2021).

Variable	exp. sign	(1)	(2)	(3)	(4)	(5)	(6)
Constant	?	0.0681	0.0018	0.0014	-0.1525	-0.1710	0.0060
		(0.1854)	(0.8604)	(0.8957)	(0.5857)	(0.5477)	(0.5144)
emissions	?	-0.0164**			-0.0170**		
		(0.0433)			(0.0453)		
MSCI	?		-0.0086			-0.0103	
			(0.3030)			(0.2580)	
Intensity	?			-0.1757**			
				(0.0431)			
MarketCap	+				0.0218	0.0221	
					(0.4265)	(0.4553)	
Greendummy	?						0.0513**
							(0.0219)
Adj. R^2		0.0297	0.0139	0.0016	0.0410	0.0043	0.0341
Degrees of freedom		82	82	82	81	81	82

Table 9: Cross sectional regression results using the company-level CAARs (-10,10) from the single factor model as the dependent variables. To avoid skewness issues, the logarithm of the variables *emissions*, *Intensity* and *MarketCap* are used. The number of observations equals 84 for all regressions. In brackets under the variable coefficients, the related p-value is given. *, ** and *** represent the significance level of 1%, 5% and 10%.

the government, with lower volatility and higher returns, when comparing green and brown firms. Both effects are robust, as the same effect is obtained, when including the Scope 2 emissions, controlling for the country specific effect and using different event windows (s. Table 22 to Table 25). Thus, I reject the third hypothesis, as green and brown firms react differently to the election of a FRPP into the government.

6.4 Implications for investors

The above presented results indicate that there are arbitrage opportunities for investors and funds to increase their portfolio returns around national elections. In the following, I will present some of these:

One possible strategy is to use the country-specific return compensation around the voting day. When splitting the countries according to their return response into two groups, above and below the mean, holding the upper one and shortening the lower one reveals on average in the thirty days around the elections an abnormal return of 5-6%. When repeating it with the top and bottom quartile,

this even increases to around 9%.

Under a successful FRPP participation this effect is even accelerated: when holding stocks during elections where FRPP participate and shortening in cases where the FRPP was not part of the election, around 2% abnormal returns can be expected. When holding stocks in the case that the FRPP is over 20% and shortening otherwise, 1% extra return can be obtained. 5% additional returns are possible, when holding stocks around elections, where a FRPP wins.

These elections are also a possibility for ESG-aware investors, who would profit from holding green stocks and shorting brown ones, with higher returns of around 4-5%. With the lower volatility of greener companies in mind, this strategy would also hedge the general election effect on volatility leading to a lower risk exposure of the portfolio.

Next to trading stocks, futures, options and swaps betting on volatility can be used to boost returns. With the consistent and dramatic rise in volatility around elections in mind, this could be an even more effective tool to elevate the portfolio performance of investors and funds.

7 Discussion

This study examined the effect of FRPP competing in national general elections in European countries and their influence on investor returns and risks. Using an event study methodology and a sample of 66 elections in 16 European countries from 2008 to 2024, I determine the short-run abnormal returns and volatility, which I regress in a second step on variables explaining the recent success of FRPP and general election characteristics. In addition, I investigated whether the election of a FRPP into the government affects the investors' perception of sustainability, thus greener and browner stocks differently.

The results reveal that the volatility, as a consequence of political uncertainty, increases dramatically in most of the countries around national elections. On average it can easily double during the voting week, confirming the results found by the literature (Baker et al., 2016; Białkowski et al., 2008; Pástor and Veronesi, 2012). This trend starts already ten days prior the elections aligning with the results of Pantzalis et al. (2000).
In line with the theoretical framework by Pástor and Veronesi (2012), the higher risks should cause a compensation for investors in form of higher returns. I find some evidence for this claim, as there seems to be a slightly significant positive return of 0.8%, which increases parallel to the volatility.
But in the robustness checks the return effect fails to remain its significance and varies across countries indicating country specific factors driving the returns. Furthermore, the returns and volatility are decoupled after the events, as the volatility stays on that level parallel to a return decrease. Thus, investors aren't compensated sufficiently for the higher risks they face (Białkowski et al., 2008).
In total, I find convincing evidence, that national elections induce a jump in volatility. In contrast only little support is provided for the expected return compensation, when examining the general election effect (Pantzalis et al., 2000; Pástor and Veronesi, 2012).
General election characteristics explaining the volatility and returns remain insignificant in contrast to the findings by Białkowski et al. (2008) and Pantzalis et al. (2000). Only close election races seem to lead to more uncertainty, thus

more returns (Białkowski et al., 2008).

The recent success of the FRPP in Europe adds a new contender to the established political parties. Alongside their current rise in European parliaments, I find significant evidence, that they increase the volatility and returns around national elections[11]. Characterised by a radical ideology, FRPP challenge the political discourse and the established parties causing more uncertainty and accelerating the general election effects.
Supporting evidence is further provided, when examining the countries, where FRPP are in power for several years, thus no upcoming, new trend. In those countries, the returns and volatility are negatively correlated with FRPP success in national elections. FRPP are known for being conservative and protecting the status quo. In combination with lower economic growth during their legislature (Funke et al., 2023), a reelection of an already established FRPP doesn't induce political uncertainty leading to lower volatility and returns.

Based on my results I can confirm that volatility as well as the returns are affected by the recent success of the FRPP in national elections of European countries. With their new, extremely different political position and style, they strengthen the stock market reaction around national elections, but once they got established, the uncertainty and the effect on stock markets clears.

In addition to the political landscape, the FRPP affect also the public discourse and investment climate about sustainability, as green and brown companies react differently to elections of a FRPP into the government. Most of the FRPP reject or at least don't support efforts to mitigate or adapt to climate change and its consequences[12].
The different effects on companies depending on their environmental performance reveal surprising results: green companies yield lower risks and higher returns compared to brown ones, when a FRPP is elected into the government. These

[11] Larger volatility and simultaneously higher returns after a right-wing election success aligns with the findings by Leblang and Mukherjee (2005) and confirms, that the partisan theory holds for radical right wing parties as well.
[12] Examples for FRPP's opinion on climate change are presented in subsection 3.1.

results contradict the theory by Bolton et al. (2024): under a FRPP government, transition risks and simultaneously returns should at least in the short run decrease for brown firms. In contrast, I find that brown companies experience higher risks and lower returns. As investors adjust their portfolios only to long-term changes in transition risks rather than short-term political developments (Bolton et al., 2024), this could explain, why the theory cannot explain the obtained results.

Greater returns and lower risks for green companies are also found by Pástor et al. (2021), as they examined the recent outperformance of green stocks around events, where climate change concerns of investors arise. The election of a FRPP, like the election of Donald Trump in 2016 or his withdrawal from the Paris Agreement (Ardia et al., 2023), displays such an event. According to Pástor et al. (2021), investors and consumers react immediately to these events and adjust their preferences and portfolios. The event induces an increase in investors' or consumers' attention and demand for sustainable products, inducing the stock price increase for greener companies (Pástor and Veronesi, 2012; van der Beck, 2022). With the position of a FRPP government regarding climate change in mind, investors expect the next government to impose even more stringent climate regulation (Ramelli et al., 2021). In their opinion sustainability won't be an option in the future, but definitely implemented. Consequently, investors value the better environmental performance of green companies (Ramelli et al., 2021) and don't account for the short term support of brown companies coming from a FRPP government.

This argumentation is supported by the fact that in the EU environmental protection laws and regulations are mostly imposed by the EU for all their member countries (e.g., the EU Taxonomy or the CSRD-directive)[13]. As the EU is currently supporting greener politics in the long run, investors expect that this attitude won't change, when a national government contains a FRPP. This could explain why investors still value the better environmental performance of green companies.

[13]This argumentation only holds in the European context and might be different in other more federal political settings, like the US.

In the recent EU parliament election on the 09.06.2024, FRPP succeeded as well, making it more difficult to pass future environmental regulation with the current seat distribution. As the voting outcomes were published, investors seemed to have sold their green stocks, which experience negative returns after the election (Abnett, 2024)[14]. An EU-election seems to affect the perception of sustainability of investors more heavily than national elections, which would be more in line with the theory by Bolton et al. (2024).

In summary, based on the findings of this study I reject the three hypothesised claims: firstly, national election in European countries impact returns and especially the volatility at local stock markets; secondly, the recent success of FRPP accelerates the volatility and return reaction around national elections; thirdly, green and brown firms are affected differently by the election of a FRPP into the government. These findings are significant and except from the general return effect robust, indicating their general reliability and validity of these results.

The results found in this study about national elections, the recent rise of FRPP and their influence on sustainability have crucial implications especially for stock market participants. Possible arbitrage opportunities are introduced in subsection 6.4. In general, they should be aware that the volatility of stocks can easily double around national elections without a sufficient return compensation. As a consequence, investors and funds should adjust their strategy accordingly. Especially the country specific difference in the return effect (Figure 4), makes it difficult to predict the developments of returns around elections. To diminish the vulnerability to national elections effects, investors are recommended to diversify their portfolio more internationally and reduce the home bias. But as subsection 6.4 indicate, multiple arbitrage opportunities exist for investors and funds to increase their profits around national elections.
These general election effects are even accelerated, when a FRPP successfully participates. Especially in the light of the recent and expected future success

[14]A small event study (s. Table 26) showed a general negative and significant stock market reaction in general and for green indices right after the election. In contrast to my findings, green companies don't outperform the market.

of FRPP in European parliaments, investors and funds will need to include the influence of FRPP on stock markets into their investment decisions as described above.
Finally, this study incorporates significant information for sustainable investors, who are predominant in Europe (Boermans et al., 2024). The upcoming trend of FRPP and their influence on sustainability is difficult to assess for green investors and companies. The results indicate the immediate stock market reaction to winning success of a FRPP, providing the investors and companies with a hint how to modify their strategy in the future. This holds as well for investors who recently tried to profit from the risk premium of brown stocks.

Beside the essential implications for investors and funds, my study adds value to the literature as follows. With a detailed investigation of the existence and timing of returns and volatility, it provides a new perspective of cross-country election effects and is the first to examine the European context. For this purpose, the abnormal volatility method by (Białkowski et al., 2008) further progressed to a company level making it more appropriate for future research on abnormal volatility.
Finally, this research is, to my knowledge, the only study with an in-depth analysis of the stock market reaction to the current success of FRPP in Europe indicating their impact on economy and sustainability.

Limitations concerning the validity of the results could arise because of the time window of the elections included in the sample. As I examine the recent success of FRPP in Europe since 2008, there could be a potential influence from the financial crisis. Hikes in volatility around voting period could be driven by the crisis rather than the election. As general elections can be seen as exogenous events (Dai and Zhang, 2019) and the coefficients are similar to the ones of Białkowski et al. (2008), this endogeneity concerns become less likely. In addition, the largest concerns are rooted in the sample used for the election where the FRPP participates. At first, the sample size of election wins of FRPP in European countries is small, as they are currently at the forefront, but not win-

ning the elections. Secondly, the sample only contains European countries, where FRPP are an upcoming trend. The results are therefore not perfectly applicable to countries, like the US or South America. This holds for the general findings about the FRPP, but especially for the perception of sustainability. European investors are well-known for their interests in sustainability, thus their valuation of green and brown stocks differ to other countries, limiting the generalisability of the results.

Based on the limitations, future research could investigate this topic and the findings of this study based on a larger sample of FRPP election success in European countries or the EU parliament. In addition, future investigations could prove the findings of this study when focusing on other continents, like the US or South America. Finally, next to the short term effect the literature could investigate the long-term effect during a FRPP government legislature on the stock market in general and the perception of sustainability.

8 Conclusion

This study analysed the effect of general elections and the recent success of FRPP on local stock markets and the valuation of sustainability around national elections in European countries. The core findings are summarised in the following:

1. National elections cause political uncertainty and affect domestic stock markets. Especially the volatility grows extremely starting ten days prior to the election but fails to induce an adequate return compensation for investors.

2. The participation of FRPP and their recent success strengthen this election effect (+9% in volatility and +5-10% in returns). They accelerate the increase in political uncertainty, because of their radical different political style and positions challenging the established, moderate political landscape.

3. FRPP joining the government influence the assessment of sustainability and companies' environmental performance. My data analysis showed surprisingly that green companies experience lower risks and higher returns after these elections leading to the interpretation: Even though FRPP question efforts to mitigate climate change, investors still value sustainability in the long term. It seems that, in their expectation, the green transition is just slowed down during their legislature and not stopped by the political change.

In the coming years FRPP will further change the political and economic landscape. As they are able to higher their voting share and shift the public discourse to the right, they challenge the established political parties and the globalised economy. Beside their political, economic, and societal impact, FRPP will probably affect the public discussion about sustainability by questioning the need and efforts of the ongoing sustainable transformation.

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A Appendix

A. MSCI country index descriptive statistics

Country	# of companies	Average Market Cap (USD millions)	Average ESG-Score	Average Emissions
Austria	4	7,638.51		
Belgium	13	12,057.39		
Denmark	15	40,977.51		
Finland	13	12,572.03		
Germany	58	26,321.61		
Norway	12	8,331.68		
Spain	19	24,584.26		
Portugal	4	7,426.23		
United Kingdom	83	29,638.61		
Ireland	5	11,678.55		
Hungary	3	5,839.45		
Poland	15	5,007.96		
Switzerland	45	35,215.86		
Netherlands	26	33,046.09	5.8	194,401.22
Sweden	42	12,381.72	5.5	90,923.87
Italy	24	18,244.71	5.25	4,115,917.26
Total	381	23888,95	5.52	1,170,165.74

Table 10: Descriptive statistics for the companies listed on the national MSCI country indices

B. Sampling process

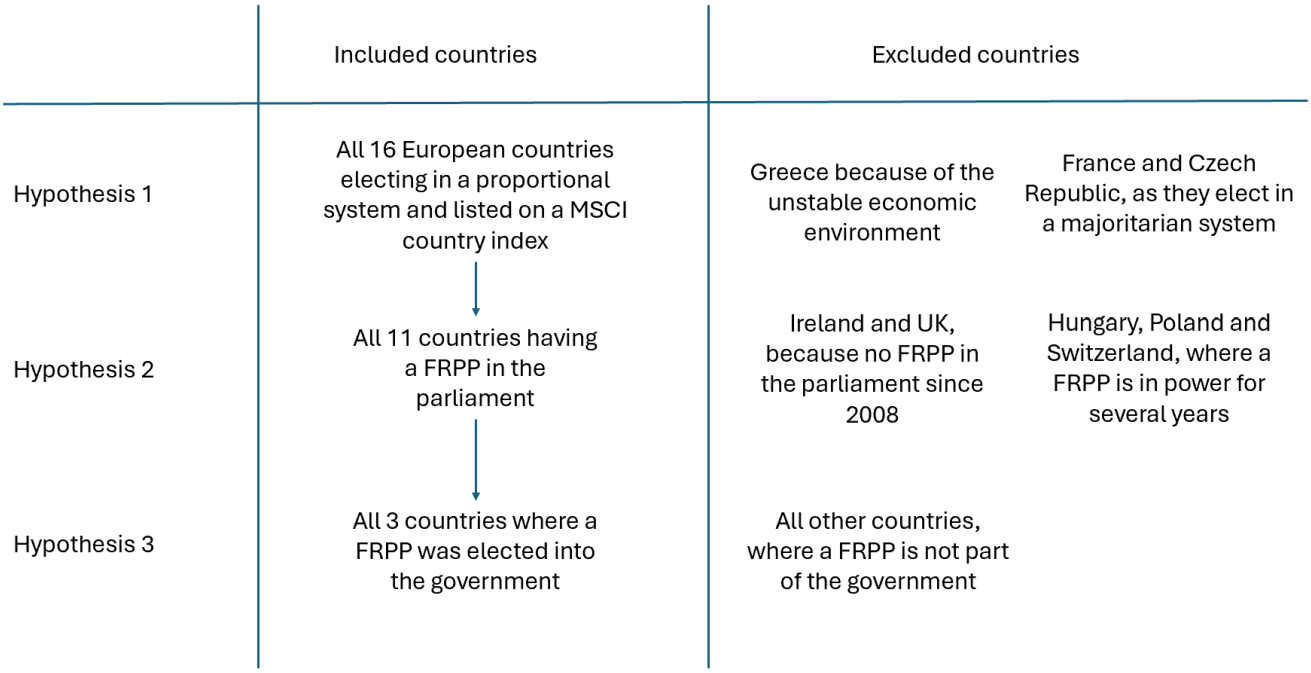

Figure 5: Data cleaning process over the three hypotheses

C. Graphs of the descriptive statistics

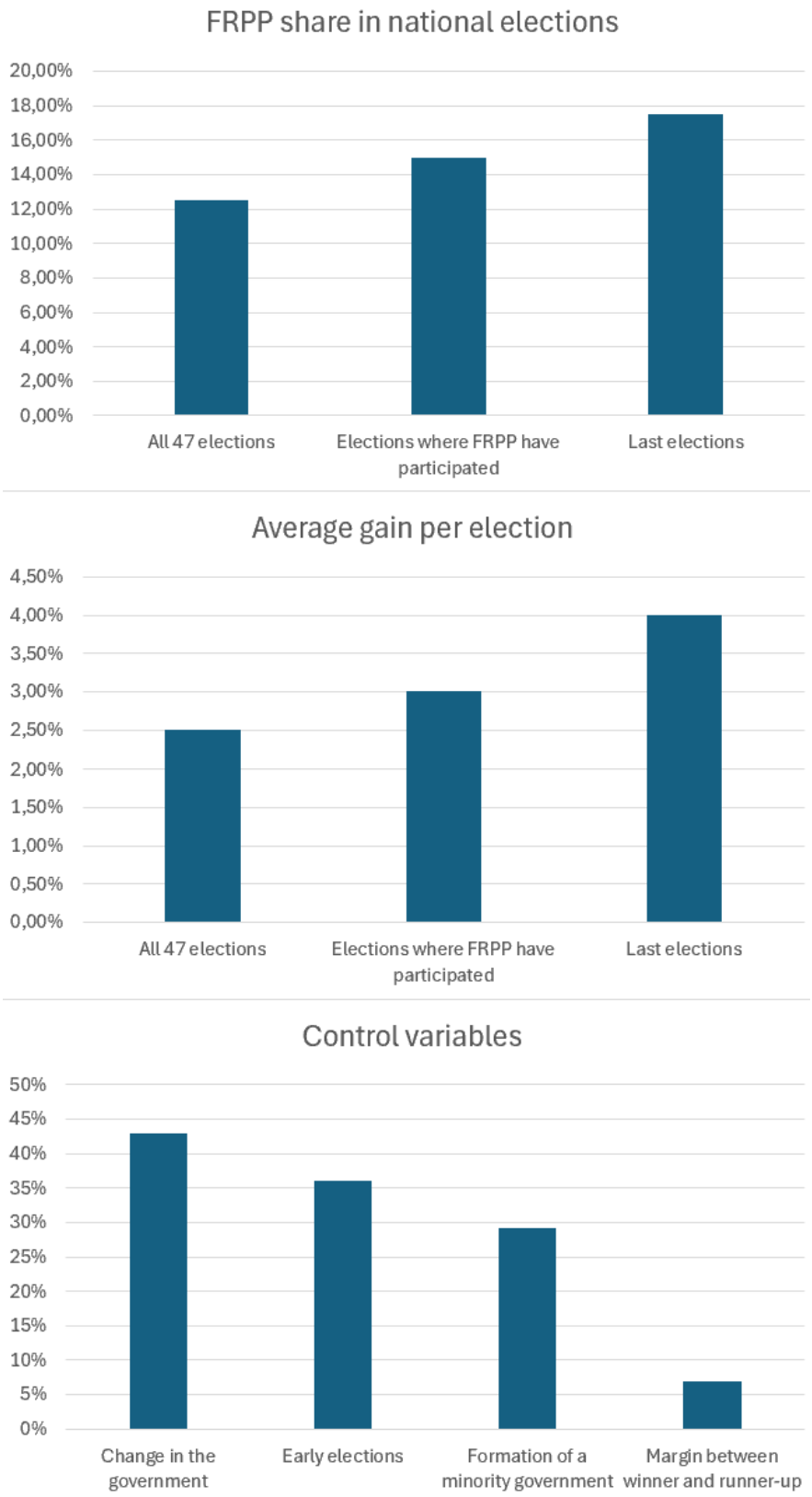

Figure 6: Graphical depiction of the descriptive statistics

D. Robustness checks for the overall volatility results

	event windows	CAV(t_1, t_2)	Volatility change	p-value
MSCI country indices	(-10,10)	10.57495***	50.3569%	0.0000
	(-5,5)	6.8474***	62.2491%	0.0001
	(-2,2)	0.8632	17.2632%	0.5552
	(-15,15)	8.3336***	26.8827%	0.0000
Asymmetric event windows	(-10,0)	20.6657***	187.8697%	0.0000
	(-5,0)	-1.9139	-5.3167%	0.7612
	(-2,0)	-2.6706	-89.0202%	0.4308
	(-15,0)	26.4489***	165.3056%	0.0021
Random event days	(-10,10)	2.7602	13.1438%	0.4422
	(-5,5)	2.4353	22.1391%	0.3207
	(-2,2)	0.8989	17.9780%	0.3654
	(-15,15)	1.0092	3.2555%	0.6770

Table 11: Overall volatility results using the MSCI country indices, asymmetric event windows and random event days. The p-values of a parametric t-test are given. *, ** and *** represent the significance level of 10%, 5% and 1%.

E. Robustness checks for the overall return results

	Model	(-10,10)	(-5,5)	(-2,2)	(-15,15)
Overall (MM)	Companies	0.8388%*	0.0366%	-0.0317%	0.2933%
		(0.0956)	(0.9209)	(0.9235)	(0.6549)
	MSCI	0.0677%	-0.1516%	-0.1256%	-0.1273%
		(0.8955)	(0.6646)	(0.7073)	(0.8559)

Table 12: Overall return results based on the market model (MM) using the single companies and the MSCI country indices. The p-values of the parametric test by Boehmer et al. (1991) are given in brackets below. *, ** and *** represent the significance level of 10%, 5% and 1%.

	Model	(-10,10)	(-5,5)	(-2,2)	(-15,15)
Overall (SFM)	Companies	0.8687%	0.0776%	-0.0016%	0.3634%
		(0,2353)	(0,7488)	(0,3394)	(0,9150)
	MSCI	-0.0532%	-0.2443%	-0.1638%	-0.3594%
		(0,8876)	(0,4177)	(0,8343)	(0,8296)
Overall (MM)	Companies	0.8388%	0.0366%	-0.0317%	0.2933%
		(0,2155)	(0,9153)	(0,4420)	(0,9258)
	MSCI	0.0677%	-0.1516%	-0.1256%	-0.1273%
		(0,6645)	(0,4681)	(0,8767)	(0,8489)

Table 13: Overall returns results based on the single factor model (SFM) and the market model (MM). Both use the single companies and the MSCI country indices. The p-values of the non-parametric test by Corrado and Zivney (1992) are given in brackets below. *, ** and *** represent the significance level of 10%, 5% and 1%.

	(-10,10)	(-5,5)	(-2,2)	(-15,15)	(-10,0)	(0,10)
R	0.4728	0.0568	-0.1381	0.5690	0.8321	-0.5793

Table 14: Correlation coefficient (R) by Pearson between the CAARs and the CAAVs in multiple event windows.

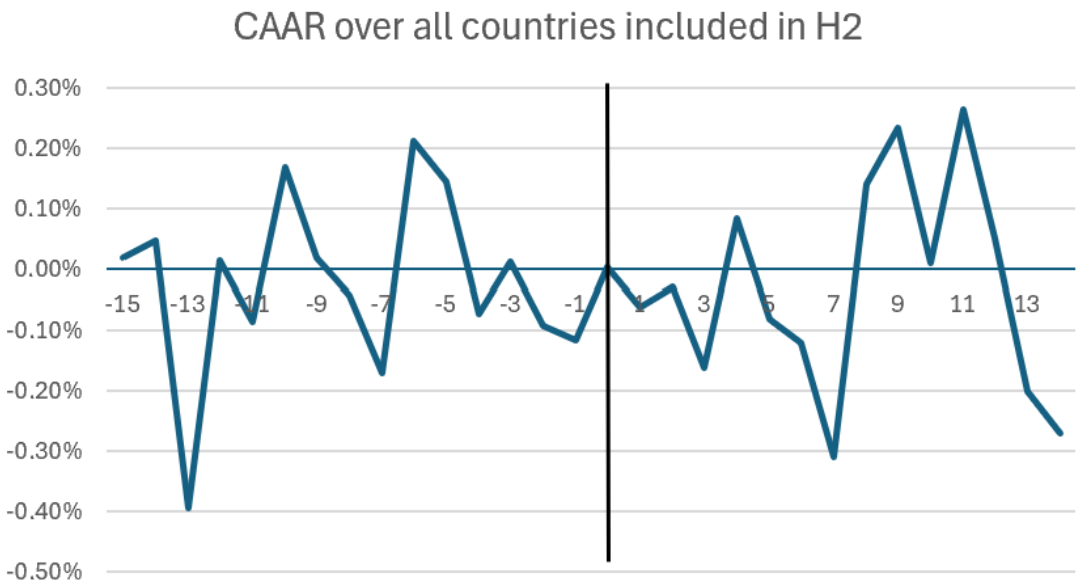

Figure 7: Overall returns including only the countries from H2.

F. Country specific volatility results

Country	Model	(-10,10)	(-5,5)	(-2,2)	(-15,15)
Austria	Companies	31.6018%	38.9749%	71.7873%	66.5746%**
	MSCI	28.3738%**	44.85617%**	-13.8535%	1.4416%
Belgium	Companies	57.6261%***	108.9319%***	33.4583%***	-46.7583%
	MSCI	83.4039%***	88.4321%***	60.0975%**	50.1817%***
Denmark	Companies	36.9414%***	30.7619%	73.1345%	52.9441%
	MSCI	49.3891%***	26.7108%**	-15.1050%	38.7355%***
Finland	Companies	-64.2612%	103.1513%	69.7366%	232.1046%***
	MSCI	26.2092%***	-50.1120%*	109.1549%***	-5.4150%**
Germany	Companies	71.1446%***	-26.8277%	294.6828%***	215.8190%**
	MSCI	179.6741%***	215.3064%***	132.6916%***	86.0463%***
GB	Companies	72.4325%***	86.0544%***	354.4936%***	32.9687%***
	MSCI	77.3113%*	159.1833%***	150.1391%***	31.3559%**
Hungary	Companies	-10.4379%	-75.9841%	-230.2442%	-53.3788%
	MSCI	20.8551%**	31.1370%**	1.6915%	13.9684%***
Ireland	Companies	31.9814%***	27.2848%***	11.9504%***	51.7856%***
	MSCI	75.8146%***	83.1059%***	-10.5477%***	65.6739%***
Italy	Companies	-45.1804%	-156.0169%	-219.8259%	-25.2893%
	MSCI	15.3945%	21.5376%*	50.1394%**	11.84134%*
Netherlands	Companies	57.5021%	-17.8631%	-209.3792%	114.3542%
	MSCI	72.3323%***	66.1177%***	33.5881%*	51.5261%***
Norway	Companies	-115.3373%***	-40.1035%***	-46.2874%***	11.1578%
	MSCI	46.5605%	92.8311%	-230.5532%***	213.6813%***
Poland	Companies	214.544%	350.6319%	-161.3130%	151.2781%
	MSCI	377.8921%***	341.1391%**	673.9519%*	294.3444%***
Portugal	Companies	0.9409%	-4.4050%	62.9873%**	-63.3490%
	MSCI	-28.4750%**	57.7600%	-321.2265%*	125.4939%
Spain	Companies	324.3259%***	164.3092%**	358.2460%*	646.6277%***
	MSCI	-0.2697%	-75.0166%*	-24.2966%**	-104.537%***
Sweden	Companies	443.8687%***	926.9159%***	330.4412%***	211.3334%***
	MSCI	149.2021%***	221.7078%***	251.3826%***	156.1934%***
Switzerland	Companies	293.1045%***	321.1119%***	237.9843%***	133.3242%***
	MSCI	173.6899%***	243.2315%*	160.5984%*	78.6634%***

Table 15: Country specific election effects on national stock market Volatility using the single companies and the MSCI country indices. *, ** and *** represent the significance level of 10%, 5% and 1% based on the parametric t-test.

G. Country specific returns based on the single factor model

Country	Model	(-10,10)	(-5,5)	(-2,2)	(-15,15)
Austria	Companies	-0.8120%***	-1,7738%	-1.6946%	-2.9220%
	MSCI	-3.7319%	-2.1381%	-1.9379%	-6.7290%
Belgium	Companies	0.4652%	-0.5002%	-0.7063%	0.3379%
	MSCI	-0.2851%	0.0821%	0.1524%	-0.4591%
Denmark	Companies	2.7970%	0.8659%	0.2022%	1.5903%
	MSCI	1.4966%	1.7850%	0.4288%	1.1287%
Finland	Companies	-3.6914%***	-1,1833%*	-1.1711%**	-5.8971%***
	MSCI	-3.9879%*	-2.2165%*	-1,1723%*	-6.5640%***
Germany	Companies	0.7473%	0.4523%*	0.4769%*	1.4819%
	MSCI	1.0543%	0.6060%	0.6099%**	1.6833%
GB	Companies	0.6223%	0.9654%	1.3123%	0.5221%
	MSCI	0.1270%	0.1455%	0.5591%	0.8849%
Hungary	Companies	1.7564%	0.3408%	-1.3345%	0.8017%
	MSCI	-0.0848%	-0.1314%	-1.2869%	-1.2610%
Ireland	Companies	6.6412%	-0.2062%	0.2680%	9.7895%
	MSCI	2.0912%	0.1731%	0.7780%	2.6988%
Italy	Companies	-2.7113%	-2.9683%*	-1.8814%*	-5.2546%
	MSCI	-0.5023%	-2.0891%	-1.9769%**	-1.7350%
Netherlands	Companies	3.0550%**	0.9478%	-0.0972%	3.5805%**
	MSCI	2.0794%*	0.2144%	-0.4551%*	3.0036%***
Norway	Companies	1.5557%*	-0.0940%*	0.7672%*	2.4493%*
	MSCI	1.5641%	-0.5123%	-0.1681%	3.2273%**
Poland	Companies	5.6277%	2.8964%	2.9484%	5.0784%
	MSCI	4.0229%	2.8813%	2.3658%	4.2056%
Portugal	Companies	-0.2752%	0.2865%	-0.0030%	-0.2643%
	MSCI	-1.1867%	0.0849%	0.6448%	-0.2931%
Spain	Companies	-0.4141%	-0.2844%	-0.1426%	-2.2365%***
	MSCI	-0.8066%	-1.2020%	-0.3181%	-2.5197%**
Sweden	Companies	-0.8803%	0.0429%	0.4931%*	-1.1306%
	MSCI	-0.5129%	0.2590%	0.4155%	-1.0179%
Switzerland	Companies	1.3202%	1.1879%	0.5585%	0.8438%
	MSCI	-2.0087%	-1.2263%	-1.1621%	-2.6665%*

Table 16: Country specific election effects on national stock market returns using the single factor model including the single companies and the MSCI country indices. *, ** and *** represent the significance level of 10%, 5% and 1% based on the parametric test by Boehmer et al. (1991).

H. Country specific returns based on the market model

Country	Model	(-10,10)	(-5,5)	(-2,2)	(-15,15)
Austria	Companies	-1.1371%**	-1,8949%	-1.7441%	-3.3199%
	MSCI	-2.8591%	-1.6326%	-1.6893%	-5.4574%
Belgium	Companies	0.0874%	-0.6989%	-0.7966%	-0.1915%
	MSCI	-0.2952%**	0.0779%	0.1502%	-0.4859%
Denmark	Companies	2.8701%	0.8714%	0.1950%	1.6895%
	MSCI	1.8255%	1.9178%	0.4755%	1.5887%
Finland	Companies	-3.2201%**	-0.9412%	-1.0648%*	-5.2460%***
	MSCI	-3.4945%	-1.9604%*	-1,0512%*	-5.8676%***
Germany	Companies	0.7619%	0.4577%**	0.4813%**	1.6114%
	MSCI	0.9653%	0.5603%	0.5902%**	1.5571%
GB	Companies	0.3709%	0.8291%	1.2518%	0.0760%
	MSCI	-0.0276%	0.0730%	0.5240%	0.6328%
Hungary	Companies	2.5895%	0.8409%	-1.1097%	2.3156%
	MSCI	0.0277%	-0.0480%	-1.3370%	-0.9459%
Ireland	Companies	5.7474%	-0.6723%	0.0585%	8.5219%
	MSCI	1.7835%*	0.0362%	0.7175%	2.2590%
Italy	Companies	-0.9859%	-2.1994%*	-1.8345%*	-2.3689%
	MSCI	0.0161%	-1.8104%	-1.8461%**	-0.9485%
Netherlands	Companies	2.3362%	0.5691%	-0.2165%	3.0615%**
	MSCI	2.3336%*	0.3329%	-0.3992%*	3.4092%***
Norway	Companies	1.9105%**	0.0964%	0.8583%*	2.9706%**
	MSCI	1.9543%*	-0.3016%	-0.0715%	3.8032%***
Poland	Companies	5.5460%	2.8449%	2.8944%	5.0491%
	MSCI	3.2266%	2.4598%	2.1744%	3.0584%
Portugal	Companies	-0.9433%	0.1124%	-0.7376%	-0.9856%
	MSCI	-1.3409%	-0.0313%	0.5828%	-0.4821%
Spain	Companies	-0.6881%	-0.3857%	-0.1851%	-2.5350%***
	MSCI	-0.4429%	-1.0102%	-0.2235%	-2.0006%*
Sweden	Companies	-0.3147%	0.3524%	0.6378%**	-0.2777%
	MSCI	0.1753%	0.6257%	0.5838%	0.0313%
Switzerland	Companies	1.3603%**	0.8889%	0.5239%	0.1825%
	MSCI	-1.9057%	-1.1480%	-1.1237%	-2.5365%***

Table 17: Country specific election effects on national stock market returns using the market model based on the single companies and MSCI country indices. *, ** and *** represent the significance level of 10%, 5% and 1% based on the parametric test by Boehmer et al. (1991).

I. Robustness checks for the H2 volatility regression

Variable	exp. sign	MSCI (6)	MSCI (7)	(-15,15) (8)	(-15,15) (9)
Constant	?	15.0384	-33.1135	2.6537	-77.5835
		(0.9302)	(0.8380)	(0.9899)	(0.6821)
Year	?	-0.0070	0.1689	0.0022	0.0394
		(0.9394)	(0.8345)	(0.9816)	(0.6777)
Share	+		2.2559		9.1803*
			(0.1562)		(0.0982)
elecwin	+	0.0866	0.7927	-2.1480	-3.0618
		(0.9555)	(0.6784)	(0.1633)	(0.2030)
Δ_{prev}	+	0.8957		2.1883**	
		(0.1743)		(0.0390)	
Surprise	+	0.2911	0.4346	1.0529	1.4685
		(0.6823)	(0.5202)	(0.6966)	(0.5798)
ChangeInc	+	-0.3948	-0.3014	-0.6531	-0.6299
		(0.6457)	(0.7300)	(0.5634)	(0.6295)
MinGov	+	-0.2637	-0.2601	-0.0361	0.2623
		(0.7389)	(0.7394)	(0.9772)	(0.8379)
Early	+	0.0893	0.0529	-0.9435	-0.8698
		(0.9372)	(0.9646)	(0.3533)	(0.3724)
marginvictory	+	-0.1725	0.2762	-1.8242	-1.4350
		(0.8317)	(0.7143)	(0.2038)	(0.3191)
Adj. R^2		0.0138	0.0141	0.0634	0.0805
Degrees of freedom		40	40	40	40

Table 18: Cross sectional regression results using the volatility ratio (-10,10) based on the MSCI country indices and from another event window (-15,15). The number of observations equals 49 for all regressions. In brackets under the coefficients, the related p-value is given. *, ** and *** represent the significance level of 10%, 5% and 1%.

Variable	exp. sign	(10)	(11)
Constant	?	19.3005	-5.5797
		(0.6822)	(0.8680)
Year	?	-0.0096	0.0028
		(0.6830)	(0.8611)
Share	no effect		-2.0761**
			(0.0191)
elecwin	no effect	0.2942	0.1168
		(0.2666)	(0.1673)
Δ_{prev}	no effect	-0.0401	
		(0.8655)	
Surprise	no effect	0.0455	0.0655
		(0.9373)	(0.9212)
marginvictory	+	0.0321	-0.0115
		(0.1928)	(0.9544)
Adj. R^2		0.0618	0.0313
Degrees of freedom		6	6

Table 19: Cross sectional regression results using the volatility ratio (-10,10) from the countries, where FRPP are in power over several years. *Early*, *MinGov* and *ChangeInc* are omitted because of multicollinearity issues, as these variables take only the value of 0 during the time horizon. The number of observations equals 12 for all regressions. In brackets under the coefficients, the related p-value is given. *, ** and *** represent the significance level of 10%, 5% and 1%.

J. Robustness checks for the H2 return regression

Variable	exp. sign	MM (6)	MM (7)	(-15,15) (8)	(-15,15) (9)
Constant	?	2.2484	0.0689	-1.2110	-2.1715
		(0.5140)	(0.9860)	(0.8330)	(0.7260)
Year	?	-0.0011	-0.0005	0.0006	0.0011
		(0.5520)	(0.9260)	(0.8170)	(0.6812)
Share	+	-0.1277		-0.1650	
		(0.2031)		(0.2734)	
elecwin	+	0.1111***	0.0941***	0.1471***	0.1272***
		(0.0000)	(0.0000)	(0.0000)	(0.0000)
Δ_{prev}	+		-0.0244		-0.0348
			(0.2078)		(0.2065)
Surprise	+	0.0151	0.0231	0.0400*	0.0396*
		(0.1630)	(0.1112)	(0.0888)	(0.0792)
ChangeInc	+	-0.0059	-0.0037	-0.0210	-0.0211
		(0.6844)	(0.7893)	(0.3422)	(0.3100)
MinGov	+	0.0126	0.0133	0.0161	0.0097
		(0.3343)	(0.2817)	(0.2474)	(0.1460)
Early	+	-0.0232	-0.0152	-0.0169	-0.0154
		(0.1463)	(0.3479)	(0.5245)	(0.5463)
marginvictory	+	0.0369**	0.0425***	0.0455*	0.0496*
		(0.0160)	(0.0042)	(0.0982)	(0.0577)
Adj. R^2		0.2334	0.1931	0.1782	0.1836
Degrees of freedom		40	40	40	40

Table 20: Cross sectional regression results using the market model (MM) CAARs and the single factor model CAARs from another event window (-15,15). The number of observations equals 49 for all regressions. In brackets under the coefficients, the related p-value is given. *, ** and *** represent the significance level of 10%, 5% and 1%.

Variable	exp. sign	(10)	(11)
Constant	?	-4.8295	-3.3428
		(0.6217)	(0.7256)
Year	?	0.0025	0.0017
		(0.6134)	(0.7176)
Share	no effect	-0.0836	
		(0.5955)	
elecwin	no effect	-0.0926**	-0.0899*
		(0.0232)	(0.0601)
Δ_{prev}	no effect		-0.0340
			(0.6036)
Surprise	no effect	0.1214	0.1002
		(0.1002)	(0.1363)
marginvictory	+	-0.6032	-0.0525
		(0.2444)	(0.4000)
Adj. R^2		0.0427	0.0757
Degrees of freedom		6	6

Table 21: Cross sectional regression results using the returns (SFM) in the window (-10,10) from countries, where FRPP are in power over several years. *Early*, *MinGov* and *ChangeInc* are omitted because of multicollinearity issues, as these variables take only the value of 0 during the time horizon. The number of observations equals 12 for all regressions. In brackets under the coefficients, the related p-value is given. *, ** and *** represent the significance level of 10%, 5% and 1%.

K. Robustness checks for the H3 volatility regression

Variable	exp. sign	(6)	(7)	(8)	(-5,5) (9)	(-5,5) (10)	(-5,5) (11)
Constant	?	-10.2419	-26.0275	-6.6806	-35.5120	-35.9398	-12.6514
		(0.1902)	(0.5238)	(0.4121)	(0.1219)	(0.1276)	(0.94990)
emissions	?	0.3621			2.1001		
		(0.8534)			(0.3630)		
MSCI	?		0.1573			-3.4583	
			(0.7893)			(0.6633)	
Intensity	?			-5.4371			19.1642
				(0.8199)			(0.4178)
MarketCap	+	24.5691*	24.4546*		33.2554	36.3833	
		(0.0523)	(0.0609)		(0.1222)	(0.1330)	
Country	no effect	9.3077	7.3795	10.3875			
		(0.2708)	(0.2673)	(0.2407)			
Adj. R^2		0.0018	0.0154	0.0001	0.0018	0.0032	0.0021
Degrees of freedom		80	80	81	81	81	81

Table 22: Cross sectional regression results controlling for the country using the volatility ratio (-10,10). In addition, cross sectional regression results using the single factor model volatility ratio from a different event window (-5,5). To avoid skewness issues, the logarithm of the variables *emissions*, $Intensity$ and $MarketCap$ are used. The number of observations equals 84 for all regressions. In brackets under the variable coefficients, the related p-value is given. *, ** and *** represent the significance level of 1%, 5% and 10%.

Variable	exp. sign	(-15,15) (12)	(-15,15) (13)	(-15,15) (14)	Scope 1&2 (15)
Constant	?	-23.6784	-19.4320	-21.8942	-24.9822
		(0.2871)	(0.2983)	(0.2134)	(0.3940)
emissions	?	1.8923			2.1001
		(0.4399)			(0.2118)
MSCI	?		-0.8499		
			(0.5732)		
Intensity	?			-29.3353	
				(0.2029)	
MarketCap	+	9.5259	10.2040		28.3421
		(0.3056)	(0.2756)		(0.1282)
Adj. R^2		0.0154	0.0237	0.0093	0.0100
Degrees of freedom		81	81	82	81

Table 23: Cross sectional regression results using the volatility ratio (-15,15) based on the single companies. In regression (15) *emissions* includes the Scope 1 and 2 emissions. To avoid skewness issues, the logarithm of the variables *emissions*, *Intensity* and *MarketCap* are used. The number of observations equals 84 for all regressions. In brackets under the variable coefficients, the related p-value is given. *, ** and *** represent the significance level of 1%, 5% and 10%.

L. Robustness checks for the H3 return regression

Variable	exp. sign	(6)	(7)	(8)	(-5,5) (9)	(-5,5) (10)	(-5,5) (11)
Constant	?	-0.1730	-0.2224	0.0695	0.1589	0.1497	0.0573
		(0.5322)	(0.4367)	(0.1574)	(0.5381)	(0.7465)	(0.6382)
emissions	?	-0.0167*			-0.0135*		
		(0.0610)			(0.0877)		
MSCI	?		-0.0107			-0.0052	
			(0.2358)			(0.4223)	
Intensity	?			-0.1743*			-0.1361**
				(0.0580)			(0.0299)
MarketCap	+	0.0234	0.0267		-0.0098	-0.0119	
		(0.4133)	(0.3650)		(0.7282)	(0.6743)	
Country	no effect	0.0055	0.0136	0.0028			
		(0.7844)	(0.4657)	(0.8918)			
Adj. R^2		0.0298	0.0117	0.0369	0.0297	0.0154	0.0342
Degrees of freedom		80	80	81	81	81	81

Table 24: Cross sectional regression results controlling for the country using the CAARs (-10,10) from the single factor model including the single companies. In addition, cross sectional regression results using the single factor model CAARs from a different event window (-5,5). To avoid skewness issues, the logarithm of the variables *emissions*, *Intensity* and *MarketCap* are used. The number of observations equals 84 for all regressions. In brackets under the variable coefficients, the related p-value is given. *, ** and *** represent the significance level of 1%, 5% and 10%.

Variable	exp. sign	(-15,15) (12)	(-15,15) (13)	(-15,15) (14)	Scope 1&2 (15)
Constant	?	0.0125	-0.0114	0.0579	0.0235
		(0.4343)	(0.4800)	(0.4001)	(0.5019)
emissions	?	-0.0182**			-0.0257*
		(0.0463)			(0.0582)
MSCI	?		-0.0113		
			(0.2127)		
Intensity	?			-0.1532**	
				(0.0431)	
MarketCap	+	0.0102	0.0098	0.0143	
		(0.5328)	(0.6009)		(0.7245)
Adj. R^2		0.0117	0.0014	0.0184	0.0098
Degrees of freedom		81	81	82	81

Table 25: Cross sectional regression results using the CAARs (-15,15) from the single factor model including the single companies. In regression (15) *emissions* includes the Scope 1 and 2 emissions. To avoid skewness issues, the logarithm of the variables *emissions*, *Intensity* and *MarketCap* are used. The number of observations equals 84 for all regressions. In brackets under the variable coefficients, the related p-value is given. *, ** and *** represent the significance level of 1%, 5% and 10%.

M. European Parliament election event study results

Index	Event windows (-10,10)	(-5,5)	(-2,2)
MSCI Europe	-1.6795%	-2.5450%	-2.2579%**
	(0.4544)	(0.1210)	(0.0392)
STOXX Europe 600	-1.4146%	-1.0414%	-2.6544%*
	(0.6196)	(0.3344)	(0.0922)
MSCI Europe ESG Leaders	-0.9592%	-1.6531%	-1.9243%*
	(0.6825)	(0.3344)	(0.0922)
S&P Europe 350 ESG Index	-1.5832%	-3.1220%	-2.8581%*
	(0.6194)	(0.1802)	(0.0659)
MSCI Europe Low Carbon Leaders	-1.3704%	-2.1525%	-2.1621%**
	(0.5436)	(0.1917)	(0.0494)
CAAR of all	-1.3855%***	-2.0902%***	-2.3640%***
	(0.0000)	(0.0000)	(0.0000)
CAAR of ESG/Green Indices	-1.3032%***	-2.3061%***	-2.3125%***
	(0.0000)	(0.0000)	(0.0000)

Table 26: Return event study of the European Parliament election (09.06.2024), showing the stock market response in general and for green indices. The single factor model and the MSCI World index as the benchmark is used. In brackets under the variable coefficients, the related p-value of the test by Boehmer et al. (1991) is given. The study was also performed with the generalised rank test by Corrado and Zivney (1992), which doesn't change the significance. *, ** and *** represent the significance level of 1%, 5% and 10%.