# Essays on the Political Economy of Voting and Money in Politics

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Doctor of Philosophy
Economics

University of York Economics and Related Studies

July 2023

#### Abstract

The first chapter empirically tests the impact of terrorism and counter-terrorism on voting by focusing on the two 2015 general elections in Turkey, following the cancellation of the peace process and the resurgence of terror attacks. The impact of curfews and terror attacks on electoral outcomes are analysed in a difference-in-differences setting. Terror attacks are estimated to reduce the AKP's vote share by 3.2 percentage points while increasing the HDP's vote share by 3.6 percentage points. Curfews are estimated to cancel out the impact of terror attacks in attacked municipalities and decrease the AKP's vote share by 4.7 percentage points in non-attacked municipalities.

The second chapter investigates how elected members of the US House of Representatives from 107th to 116th congresses change their ideological positioning in response to campaign contributions. By using the contribution ratios to the Republican and Democrat congress members, the study classifies campaign contributions under three groups; "Democrat", "Republican" and "split-ticket" contributions. While "Republican" and "split-ticket" contributions have a negative impact on the ideology score of representatives, indicating that these types of contributions make representatives more liberal, or less right-wing, "Democrat" contributions affect it positively after accounting for electoral competition. Overall, money has a centripetal effect on congress members' ideology.

The third chapter investigates the relationship between campaign contributions made by corporations and their financial returns over the period of 2000 to 2020 in the US using the data from Center for Responsive Politics and Center for Research in Security Prices (CRSP). The findings reveal there is not a robust relationship between campaign contributions and corporate returns. When examining corporations that contribute solely to Republicans, for such corporations the estimated impact of campaign contributions is negatively correlated with cumulative returns. An additional \$100,000 of contributions to solely Republicans is associated with 37.5% decrease in cumulative returns.

## Declaration of Authorship

I, Mehmet Akif Yardımcı, declare that this thesis entitled "Essays on the Political Economy of Voting and Money in Politics" is a presentation of my own original work. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as references.

Chapter 1 is a single-author paper and submitted to Economics & Politics (revisions for R&R in progress). An earlier version of this paper was presented in 2019 at the Stockholm University, Workshop on "Inequalities, Peace and Conflict in Turkey", at the University of York, Political Economy Cluster and in 2021 at the 78th Annual Midwest Political Science Conference.

Chapter 2 is a co-authored paper with Andrew Pickering. An earlier version of this paper was presented in 2022 at the 79th Annual Midwest Political Science Conference and in 2023 at the University of York, Economic History and Political Economy Cluster.

Chapter 3 is a single-author paper.

## Acknowledgements

I would like to express my sincere gratitude to my supervisor, Professor Andrew Pickering, for his continuous support. His generosity and wisdom throughout the research have always inspired me and given me the strength to overcome challenges. I am also grateful to the members of my supervisory committee, Professor Cheti Nicoletti and Dr. Matthias Flueckiger, who have enriched my research with their invaluable feedback and guidance.

I would also like to thank the Department of Economics, especially the Political Economy Cluster, for providing a supportive environment for conducting my research. Thanks to my dear friends Filippos, Fikret, and Laia for their company along the way. Without their support and sincere friendship, York would not have become home to me.

I am beyond grateful to my family. I dedicate this thesis to my parents, Fadime and Adnan, who have made me believe that I can achieve anything I set my mind to. I felt their endless love and support not only during every moment of my PhD journey but throughout my entire life. My sisters, Şebnem and Sanem, were always there to guide me and provide a shoulder to lean on when I needed it most. I also appreciate my brother-in-law, Utku, for supporting my family when I could not, and my nephew, Özgür Kemal, for the joy he has brought into our lives.

Last but certainly not least, I would like to express my heartfelt gratitude to my beloved wife, Öznur. Her limitless love and unwavering support inspire me to become the best version of myself. I am also deeply thankful for my precious daughter, Arya Nehir, whose smile has the power to render any obstacle insignificant. The presence of these two wonderful women in my life imparts profound meaning to everything I do, and my gratitude knows no bounds.

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To my parents...

## Introduction

This thesis explores different themes around the political economy of elections in different national settings. Specifically, it examines the impact of terrorism and counter-terrorism on voting behaviour in the case of Turkey, and the impact of campaign contributions in the United States by investigating their impact on the ideological positioning of representatives, as well as their impact on the corporations' financial returns. The thesis consists of three chapters and each of the three chapters is presented as a self-contained paper.

The first chapter focuses on the political consequences of terrorism and counter-terrorism in Turkey, using a difference-in-differences research design. The empirical studies to date fall short in measuring the impacts of counter-terrorism on voting behaviour. The impacts of counter-terrorism have primarily been analyzed in a theoretical context, with the assertion that counter-terrorism measures could potentially generate unintended consequences. Hence, the first chapter examines the impact of curfews and terror attacks on voting behavior in between the parliamentary elections in June and November 2015. The chapter contributes to existing literature by empirically testing the effects of counter-terrorism on voting, separating the impacts of terrorism and counter-terrorism, and exploring the socioeconomic factors that make certain segments of the population more responsive to these issues. This chapter uses various data sets. Electoral outcomes at the municipality level are provided by the Supreme Election Council of Turkey for the 2011, June 2015 and November 2015 general elections. While data for curfews at the municipality level are obtained from the Official Gazette of the Republic of Turkey, socio-economic data come from the State Planning Organization of the Republic of Turkey's report "Municipalities Socio-Economic Development Ranking Research" (Teskilati 2004). Data on terror attacks are gathered from national newspapers. In addition to that the Turkish State-PKK Conflict Event Database (TPCONED) is also used as a comparison. The findings suggest that terrorism reduces support for the incumbent Justice and Development Party (AKP) by 3.2 percentage points, while increasing support for the pro-Kurdish People's Democratic Party (HDP) by 3.6 percentage points.

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Additionally, terrorism mobilizes voters and raises the voter turnout rate by 1.3 percentage points. The implementation of curfews is estimated to offset the impact of terrorism on both the AKP and the HDP in attacked municipalities. However, in non-attacked municipalities, curfews are estimated to decrease support for the AKP by 4.7 percentage points. Curfews are also estimated to decrease support for the HDP by 3.7 percentage points in neighbouring municipalities. The effects of curfews are more pronounced in urbanized and literate areas. Moreover, curfews are estimated to lead to an exchange of votes within the left-wing, particularly among the HDP and the secular Republican People's Party (CHP), among more educated voters.

The second and third chapters contribute to the literature by investigating the impact of campaign contributions in the United States by focusing on two different themes in the literature, the impact of campaign contributions on the ideology of US House of Representatives and the impact of campaign contributions on the corporations' financial returns.

The existing literature on campaign contributions and their influence on policy presents a duality that remains unresolved. There is growing evidence of directly beneficial policy, though limited evidence that broad ideological positioning is affected by campaign contributions. Hence, the second chapter analyzes campaign contributions and ideology scores of representatives across ten US Congresses, spanning from the 107th to the 116th. The list of contributions to representatives are gathered from the Center for Responsive Politics, and Lewis et al. (2018) is used as a measure for the ideology score of representatives. The data set includes 20,666 campaign contributions made to 610 representatives who have been elected at least three times, along with representatives' ideology scores for each congress. The findings of the second chapter reveal that campaign contributions from donors who typically contribute to the Republican party, "Republican money" and those who contribute to both political parties, "split-ticket money" contributions have a negative effect on representatives' ideology scores. This suggests that these types of contributions are estimated to lead representatives to a more liberal or less right-wing ideology on economic matters. Interestingly, this effect is primarily observed among Republican representatives, indicating that donors who contribute to Republicans and both political parties push Republican representatives toward a more liberal ideology. Additionally, when considering different subsets of contributions, the study finds that money from donors who typically contribute to the Democrat party "Democrat money" has a positive impact on representatives' ideology scores, leading them to a more conservative ideology on economic matters. The overall impact of campaign contributions on representatives is centripetal, meaning it pulls representatives toward the centre. The study shows that an additional \$100,000 of "Republican money" and "split-ticket money" contributions are estimated to decrease representatives' ideology scores by 0.01

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points. The magnitude of this impact is higher in subsets with lower competition. On the other hand, results focusing on representatives facing greater political competition suggest that an additional \$100,000 of "Democrat money" is estimated to increase their ideology scores by 0.007 points, highlighting a moderating impact of political campaign contributions.

The insights obtained on the campaign contributions in the second chapter inspired the research question for the third chapter. If campaign contributions have an impact on the ideological positioning of representatives, hence their voting behaviour, are there any financial benefits for corporations in return of their contributions? Thus, the third chapter examines the impact of campaign contributions on the financial returns of corporations in the US for the period from 2000 to 2020. To investigate the financial benefits of campaign contributions for corporations, third chapter uses two sets of data, campaign contributions of corporations from 2000-2018 that is gathered from the Center for Responsive Politics and return data of the same corporations from 2000 to 2020 that is gathered from the Center for Research in Security Prices (CRSP), US Stock and US Index Databases. The findings suggest that campaign contributions have a significant negative impact on corporate returns when corporations contribute solely to the Republican party. This implies that campaign contributions can result in financial losses for corporations. An additional \$100,000 contributions to solely Republican representatives are associated with a 37.5% decrease in cumulative returns for corporations in the following two years while the representatives are in office. Contributions solely to Democrat representatives also have a negative coefficient estimate, while contributions to both political parties have a positive coefficient estimate. However, these findings are not statistically significant. On the other hand, when restrictions on contributions to solely Republican are relaxed to 'majorly Republican', the estimated negative impact of campaign contributions loses its significance. Overall, findings of the third chapter reveal that there is not a robust relationship between campaign contributions and corporate returns.

## Chapter 1

# Terrorism, Counter-Terrorism, and Voting: The Case of Turkey

#### 1.1 Introduction

Terrorism, and appropriate counter-terrorist policy, are issues of major importance for both policymakers and social scientists especially since the 9/11 attacks. Not only the US and Middle Eastern countries but also many Latin American and European countries have suffered from transnational and domestic terror attacks in recent years. According to Ritchie et al. (2022), the number of confirmed deaths from terrorism increased dramatically from 4,403 in 2000 to 44,940 in 2014.

This study explores the political consequences of terrorism and counter-terrorism in the case of Turkey in a difference-in-differences setting. The country has experienced terror since the early 1980s, with the establishment of the armed Kurdistan Workers' Party (PKK). Following decades of sporadic attacks a peace process was initiated in 2009, culminating in a cease-fire in 2013. Nevertheless, the peace process was cancelled immediately after the national elections in June 2015, when the incumbent party lost the majority in the parliament and announced an early election to be held in November the same year. In between these two elections more than 300 people were killed in 96 terror attacks in 51 municipalities and in response curfews were implemented in 15 municipalities for 77 days in total. This context allows an analysis of the impacts of counter-terrorism and terrorism by examining the changes in voting behavior in relation to curfews and terror attacks.

Thus, this study will focus on the two parliamentary elections within the 5 months namely June and November 2015 in a difference-in-differences setting. It contributes

to the existing literature through three different channels. First, this study will show the impact of counter-terrorism on voting empirically by testing the impact of curfews. Second, it will shed light on the contradictory findings of existing empirical studies by disentangling the impact of terrorism and counter-terrorism. Third by using observable socioeconomic data it will provide new insights for the discussion on economic consequences of terrorism and counter-terrorism by presenting which segments of the population are more electorally responsive to terrorism and counter-terrorism.

The estimation results are that terrorism decreases the support for the Justice and Development Party, the AKP (incumbent), by 3.2 percentage points, and increases the support for the People's Democratic Party, HDP (pro-Kurdish political party), by 3.6 percentage points, while it also mobilizes voters and increases the voting turnout rates by 1.3 percentage points. The implementation of curfews is estimated to completely offset the impact of terrorism for both the AKP and the HDP in attacked municipalities. However, curfews in non-attacked municipalities are estimated to decrease the support for the AKP by 4.7 percentage points. The implementation of curfews is found to decrease the support for the HDP by 3.7 percentage points in neighbouring municipalities. The conditional effect of curfews are stronger in more urbanized and literate municipalities. Furthermore, curfews in both attacked and non-attacked municipalities lead more educated voters to make an exchange within the left wing among the HDP and the secular Republican People's Party (CHP).

The study is organised as follows: Section 2 provides a review of the literature. Section 3 presents the hypotheses and links them to the theoretical debates. This follows with a brief outline of the contemporary Turkish political environment with regards to terrorism and counter-terrorism. Section 5 discusses the identification strategy and methodology, and also introduces the variables and data sources. Section 6 presents and evaluates the results generated from the difference-in-differences estimates. Section 7 draws some conclusions derived from the analyses and highlights the importance of the study.

#### 1.2 The Literature

The literature examining whether terrorism is effective in achieving the political goals of terrorist groups mostly focuses on political outcomes. Since government responses to terrorism are at least partly driven by electorates and there is a correlation between terrorism and electoral calendars (Hodler and Rohner 2012; Bali and Park 2014; Aksoy 2014, 2018), many studies have investigated how much terrorism influences incumbent parties and their policies. Early studies on the effectiveness of terrorism used cross country data and focused on incumbents' policies (Pape 2003, 2005; Abrahms 2007).

Pape (2003) finds that terrorism resulted in territorial concession in different countries (US, Sri Lanka, France, and Israel) which makes it a strategic and effective tool. In contrast, Abrahms (2007) using 10 countries (India, Philippines, Iraq, Afghanistan, Russia, Pakistan, Nigeria, Nepal, Colombia, Uganda) finds that particularly in democracies terrorism is not effective by comparing the civil liberty level of targeted countries with respect to the objective of terrorist group and the outcome of terrorist attacks.

However, other studies pointed out the difficulties of controlling for country specific factors that may also be correlated with the incidence of terrorism (Iyengar and Monten 2008; Gould and Klor 2010). As such, case studies have become the main research method to analyze the impact of terror, with the focus shifting to voting behaviour. The scholarly debate has revealed that exposure to terrorism has various implications for voters. On the one hand, terrorism may result in government replacement by making the incumbent's competence questionable (Bali 2007; Gassebner et al. 2008; Montalvo 2011; Kibris 2011; Montalvo 2012); on the other, it can increase support for more hawkish political parties and politicians (Berrebi and Klor 2006, 2008; Kibris 2011; Getmansky and Zeitzoff 2014). Montalvo (2011) examined the impact of the 2004 Madrid attack on voting in Spain. He uses the difference in voting deadlines for Spanish nationals living abroad and living in Spain. Using a difference-in-differences method, he finds that terrorist attacks that took place three days before the election decreased the support of incumbent. In the case of Turkey, Kibris (2011) analyses the impacts of terrorism on voting focusing on the 1991 and 1995 general elections by using a data set which includes the date and the place of burial of Turkish security forces who died in PKK terrorist attacks. She concludes that terrorism decreases the support for the government and also increases the support for right-wing parties that are less concessionist compared to left-wing counterparts. To get more robust results, some scholars focus on the localities of terror attacks to compare the voting behaviour of local victims and isolated voters (Weintraub et al. 2015; Birnir and Gohdes 2018), while some others address the impact of terrorism on participation (Bali 2007; Berrebi and Klor 2008; Robbins et al. 2013; Gallego 2018; Birnir and Gohdes 2018). Weintraub et al. (2015) find that the pro-peace candidate performed better in municipalities with higher violence while the hawkish candidate performed better in municipalities with lower violence in Colombian presidential elections underlining the need for a nuanced analysis that considers the distinct preferences and voting behaviors of local victims and isolated voters. They also find that the relationship between terror attacks and the voting choice is non-linear. In contrast, using seemingly unrelated regression (SUR), Birnir and Gohdes (2018) find that while local victims of terror attacks punish parties associated with perpetrators, voters isolated from such events punish the incumbent in the case of Peru.

Notwithstanding the rich insights regarding the varied, complex ways in which terrorism influences voting behaviour, these empirical studies fall short in measuring the impacts of counter-terrorism on voting behaviour. The impacts of counter-terrorism have primarily been analyzed in a theoretical context, with the assertion that counter-terrorism measures could potentially generate unintended consequences, such as increasing political support for terrorist groups (Rosendorff and Sandler 2004; De Mesquita 2005; Siqueira and Sandler 2006; Bueno de Mesquita and Dickson 2007; Siqueira and Sandler 2007). This would depend on complex factors, including the intensity of counter-terrorism, the trade-off between counter-terrorism spending and provision of public goods, provoking counter-terrorism to radicalize a targeted population, backlash of proactive counterterrorist measures, and the effect of counter-terror on economic opportunity. Rosendorff and Sandler (2004) present a two-player game in which the government chooses the level of proactive counter-terror measures and then terrorists choose the type of attack -normal or spectacular. By endogenizing terrorist attacks, they study a game where the intensity of counter-terrorism matters and harsh measures result in higher recruitment for terrorist organisations which leads to spectacular events with dreadful consequences. On the other hand, Siqueira and Sandler (2006) present a model where both government and terrorist organisation seeks public support and act simultaneously. Drawing on two possible scenarios, the authors establish that both actors are forced to reduce terrorism. In the first scenario potential terrorist supporters would not support the terrorist organisation in the presence of effective counter-terrorism, and terrorist militant activity falls. In the second scenario, harsh government measures backfire, therefore providing public goods become more efficient and by doing so government avoids terrorists taking the leadership role and increase attacks.

Benmelech et al. (2015) empirically test counter-terrorism's effectiveness on reducing terror attacks and conclude that while selective (punitive) house demolitions decreases the number of suicide terrorism acts, precautionary (indiscriminative) house demolitions increase it. However, no studies have yet empirically investigated the relationship between voting and counter-terrorism. In this context, there is a need to explore counter-terrorism to disentangle its impacts from those of terrorism as the two occur simultaneously in almost all cases. That is, findings relating to voting behaviour regarding the impact of terrorism are potentially conflated with heterogeneous actions regarding counter-terrorism. This study aims to fill that lacuna by empirically testing the impacts of curfews along with terror attacks on voting behaviour at the municipality level, using a difference-in-differences approach for the 2011 and the two 2015 general elections in Turkey.

Turkey provides a useful, yet under-examined, context to explore the impacts of counterterrorism and terrorism on voting behaviour. Despite the extent of terrorism, its impacts on voting were investigated a decade ago for the first time. Kibris (2011), who focused on the 1991 and 1995 parliamentary elections, concluded that terrorism reduced support for the ruling government and boosted support for right-wing parties. However, the political spectrum changed dramatically in the 2000s, when the Justice and Development Party (AKP) government attempted officially to find solutions to terrorism. In 2009, the AKP government announced a peace process followed by a ceasefire in 2013. However, the peace process was cancelled immediately after the national elections in June 2015, when the incumbent lost its majority in parliament and announced an early election for November of the same year. This context stimulated academic interest leading to more recent attempts to investigate the impact of terrorism on voting. Umit (2021) follows Kibris (2011) by tracing the impact of funerals on voting, and finds that the government vote share increases in the funeral places of security force terror victims. Aytaç and Çarkoğlu (2021) on the other hand, show that increased terror attacks and heightened security concerns ahead of elections do not necessarily imply that the incumbent is going to be punished at the polls by looking at the election results in Turkey.

This research differs from Umit (2021) and Aytac and Carkoğlu (2021) in various ways and adds to the existing literature on the Turkish case. While Umit (2021) focuses the funeral places of security forces, this study shifts focus to the localities affected by terror attacks and curfews. By examining the impact of terror attacks on local victims and extending the analysis to include the effects of curfews, this study goes beyond the findings of Umit (2021). Despite the importance of their contribution, Aytac and Carkoğlu (2021) overlook the existence of multiple voting patterns in Turkey and evaluates the impacts of terrorism and counter-terrorism on a national scale. This is problematic because historically there are different voting patterns in different regions of Turkey. According to Akarca and Başlevent (2011), three clusters can be identified in the political map of Turkey. Cluster 1 follows the Mediterranean, Aegean and Marmara coasts; cluster 2 covers much of the rest of the country apart from eastern and south eastern Anatolia; cluster 3 covers this latter region. While secular parties are the strongest in cluster 1, conservatives are the strongest in cluster 2 and pro-Kurdish parties are the strongest in cluster 3 historically. In addition to that, the voting response of local victims of terrorism and counter-terrorism and isolated voters tends to differ (Weintraub et al. 2015; Birnir and Gohdes 2018; Pechenkina et al. 2019). Thus, in order to get robust results, it is necessary to analyse the impact of terrorism and counter-terrorism focusing on the electorates with similar voting patterns.

The study contributes to the broader literature in three ways. First, it investigates the impact of curfews, as a measure of counter terrorism, on voting behaviour and also ask whether the estimated impact changes depending on whether or not a locality also experiences terror attacks. Second, the study (re)investigates the impact of terrorism

once curfews are controlled for. Third, the analysis is then extended in two directions, (a) to investigate whether the intensity (duration) of curfews has an impact on voting behaviour, (b) also whether voters from different socioeconomic backgrounds respond differently to terror attacks and the counter-terrorist measures.

#### 1.3 Theory

This study presents, to the best of the writer's knowledge, the first attempt to empirically analyse the connection between voting behaviour and both terrorism and counter-terrorism. It argues that terrorism and counter-terrorism should be evaluated separately within the same empirical model to disentangle electorates' responses to such events. This is essential as terror attacks and counter-terror measures occur concurrently in almost all cases.

Theoretical studies of counter-terrorism suggest that the nature of counter-terrorism measures may affect electorates' responses (Rosendorff and Sandler 2004; De Mesquita 2005; Siqueira and Sandler 2006; Bueno de Mesquita and Dickson 2007). In addition to that Benmelech et al. (2015); Jaeger et al. (2012) argue that indiscriminate and targeted measures have different impacts on the affected population, while Pechenkina et al. (2019) find that 'recipients' of violence tend to blame the government for indiscriminate measures regardless of rebel provocation. Thus, it is necessary to analyse responses to curfews separately depending on whether the voters' specific municipality is attacked or not. Arguably curfews occurring in non-attacked municipalities might be considered as 'indiscriminate', whilst they may be considered as appropriate in municipalities with real experience of terror attacks. In any case it seems plausible that electoral responses will differ depending on the local context.

This study therefore distinguishes between electorates living in municipalities, (i) only affected by terror attacks, (ii) only affected by counter terrorism measures in the form of curfews, and (iii) affected by both.

The first type are argued to hold the incumbent responsible for cancellation of the peace process and allowing terrorism to return. This group of voters are expected to act as suggested by Bali (2007); Gassebner et al. (2008); Montalvo (2011); Kibris (2011). That is, they will decrease their support for the incumbent because a resurgence in terrorism makes them question its competence. Terror attacks can also increase support for the perpetrators in a population, especially if that population already perceive themselves to have a reason to support the perpetrators, such as shared ethnicity (Bueno de Mesquita and Dickson 2007). This leads to the following hypothesis (H1):

**H1** Electorates living in a municipality affected only by terrorism will increase their support for the party associated with the perpetrators and decrease their support for the incumbent.

The effect of counter-terrorism measures will change depending on whether or not the electorate concurrently experiences terror attacks or in other words if the implementation of curfew is indiscriminate or it targets a certain event. Following Pechenkina et al. (2019) electorates that are affected by indiscriminate measures are expected to punish the government. Electorates affected by curfews but not terror attacks are argued to hold the incumbent responsible for conducting highly destructive military operations, interrupting daily life, particularly social interaction and economic activity during curfews. This leads to the following hypothesis (H2):

**H2** Electorates living in a municipality directly affected by curfews but not terrorism will decrease support for the incumbent.

Regarding the third type of electorates that are living in a municipality affected by both terror attacks and curfews, implementation of curfews can potentially be considered as an appropriate response aimed at providing security, thereby justifying the interruption of daily life in those municipalities. Hence, terror attacks and curfews that have occurred together in a municipality are evaluated as a separate treatment rather than a mixed treatment of terrorism and counter-terrorism. The impacts of curfews following terror attacks are ambiguous, as they are neither expected to decrease nor to increase support for the incumbent. Based on this ambiguity, the following hypothesis (H3) can be proposed:

**H3** Electorates living in a municipality affected by curfews and terror attacks may increase or decrease the support for the incumbent.

Furthermore, in a setting where the distance between municipalities is typically less than 5 kilometers, it is reasonable to anticipate spillover effects resulting from both terror attacks and curfews. Terrorism has been shown to have spillover effects on various aspects, such as by raising costs for local businesses (Sandler and Enders 2008), affecting tourism (Drakos and Kutan 2003), bilateral trade (Pham and Doucouliagos 2017), and the stock market at country level (Laborda and Olmo 2021). Therefore, apart from the primary analysis, it is important to consider that electorates not directly affected by terror attacks and curfews may still experience some influence on their voting following such events as they live in a neighbouring municipality. This leads to the following hypothesis (H4):

**H4** Electorates living in a neighbouring municipality affected by terror attacks or curfews will vote differently from electorates that have not experienced any such events.

The level of degree of both terror attacks (Weintraub et al. 2015) and counter-terrorist measures (Rosendorff and Sandler 2004) are argued to have an impact on voting behaviour. Considering that some municipalities experienced curfews for a day while some others experienced up to 15 days and in some municipalities one person died in a terror attack while in some others up to 22 people died, it is also plausible to observe intensity effects. This leads to the following hypothesis (H5):

**H5** A higher frequency of terror attacks and longer curfews will exert a more pronounced impact on voting behavior.

Finally, the negative impact of terror attacks and curfews on the disruption of daily life, particularly social interaction and economic activity, can be argued to be stronger in municipalities with higher socioeconomic standards. Higher socioeconomic standards are linked to increased economic activity and enhanced social interaction. Therefore, if there is any negative impact resulting from the disruption of daily life, it is likely to be more pronounced in municipalities with higher socioeconomic standards. This leads to the following hypothesis (H6):

**H6** Terror attacks and curfews will have a more significant impact on voting behavior in municipalities with higher socioeconomic standards.

#### 1.4 The Political Environment

Terrorism has been an integral and persistent issue in Turkey for the last 40 years due to the armed conflict between the pro-Kurdish terrorist organisation, the PKK (Kurdistan Workers' Party) and the Turkish military. The PKK is a militant organisation based in Turkey and Iraq, established to form an independent Kurdish state in southeast Turkey, where Kurdish people predominantly live. To achieve their goal, the PKK has, since 1984, committed terror attacks against civilians and Turkish security forces including the military, police, and village guards. Between 1984 and 2012, there were over 30,000 deaths while over 300,000 people have been displaced because of the conflict (Komisyonu 2013). There have also been tremendous consequences<sup>1</sup> for the Turkish economy especially in Eastern and Southeastern Anatolia (Öcal and Yildirim 2010; Bilgel and Karahasan 2017), along with indirect effects due to internal migration (Keleş 1996; Filiztekin and Gökhan 2008) and military spending (Sezgin 2001; Özsoy 2008).

The political spectrum of Turkey changed in the 2000s, when the government, departing from previous approaches, attempted officially to find solutions to terrorism. In

<sup>&</sup>lt;sup>1</sup>Bilgel and Karahasan (2017) estimate that the emergence of terrorism decreased the per capita real GDP in Eastern and Southeastern Anatolia by about 7 percent compared to a synthetic Eastern and Southeastern Anatolia without terrorism (from 1988 to 2001).

2009, the Turkish government launched a peace process with the PKK's imprisoned leader (Abdullah Ocalan), which led to the announcement of a ceasefire in 2013 as one component of the process. A so-called "wise people committee", comprising politicians, academics, journalists, notables, civil society representatives, and respected local people, was established by the government to introduce and communicate the peace process to the people in different regions in Turkey. This enabled official discussion of "the Kurdish issue" while the pro-Kurdish People's Democracy Party (HDP) became more visible in mainstream print and visual media. However, this political atmosphere shifted after the parliamentary elections in June 2015. This was the first of two parliamentary elections held within five months. After no party won a majority in the June election and no parties were able to form a coalition, the AKP government stayed in power until the next election in November. In between the two elections the peace process collapsed, and the AKP government implemented curfews in south eastern municipalities following the terror attacks. At that time, four parties were represented in parliament, namely the incumbent Justice and Development Party AKP, the main opposition Republican People's Party (CHP), the Nationalist Movement Party (MHP) and the pro-Kurdish HDP.

In exploring the political landscape of Turkey, it's crucial to understand the centralization of the political system, especially in the context of municipal governance. Unlike systems where local governments have considerable fiscal autonomy, in Turkey, a significant portion of municipal budgets is provided by the central government. This centralized distribution of funds is a critical feature of the Turkish political system. It is particularly significant for smaller municipalities, which may rely heavily on these transfers to cover a substantial portion of their budgets. Such reliance underscores the central government's dominant role in determining the financial and operational capacities of local governments, both large and small.

Furthermore, the autonomy of municipalities in Turkey is notably limited, particularly in matters concerning security and law enforcement. Security forces, including police and military units, are under the direct control of the central government rather than local authorities. This means that in situations like counter-terrorism efforts, local governments have minimal direct influence over security operations within their jurisdictions.

In 2015, the HDP decided to enter the June election as a party. Previously, the pro-Kurdish political party had entered elections with independent candidates to circumvent the 10 per cent national party vote share of Turkey's election system<sup>2</sup> given that their

<sup>&</sup>lt;sup>2</sup>Turkey's election system allows independent candidates to be elected from a certain city if they get the minimum number of votes to be elected in the relevant city. However a political party needs to exceed the 10 per cent threshold at national scale.

Table 1.1: Vote Shares and Seats Won in Turkish General Elections 2011-2015

	Incumbent (AKP)	Pro-Kurdish (HDP)	Secular (CHP)	Nationalist (MHP)
Turkey				
2011	49.83 (327)	6.57 (35)	25.98 (135)	13.01 (53)
2015  June	40.87	13.12	24.95	16.29
	(258)	(80)	(132)	(80)
2015 November	49.50 (317)	11.90 (59)	25.32 (134)	10.76 (40)
South Eastern & Eastern Turkey				
2011 2015 June 2015 November	39.93 23.08 32.94	41.63 62.99 55.64	10.24 5.20 6.33	4.30 4.54 2.98

Notes: The Justice and Development Party (AKP) is a conservative party that has been the incumbent in Turkey since 2002. The Republican People's Party (CHP) is a social democratic secular party. The Nationalist Movement Party (MHP) is a Turkish nationalist party and the People's Democracy Party (HDP) is a pro-Kurdish political party that also attracts support from left-leaning voters. Each column presents the vote shares of these political parties. The HDP's vote share in the 2011 election was collated from that of the independent candidates. The vote shares for south eastern and eastern Turkey were gathered from 132 municipalities in the region. In parentheses are the number of seats each political party gained in the parliament.

support had historically remained under 10 per cent threshold (at approximately 5,5-6 per cent). This was important because in the eastern and south eastern parts of Turkey, the combined aggregate vote share of the AKP and the candidates of pro-Kurdish political party in the parliamentary elections in 2002, 2007, and 2011 were more than 80%. That is, in all three elections in these regions the HDP obtained more votes than the AKP. However, because of the threshold the AKP took a majority of parliamentary seats in eastern and southeastern constituencies in these elections despite winning less than a third of the region's votes. In the 2014 presidential elections, the HDP's co-leader Selahattin Demirtaş, got 9.76 per cent of the votes nationally - the highest vote ever for the Kurdish political movement. This encouraged the HDP to officially enter the parliamentary elections as a party rather than with independent candidates as previously.

Table 1.1 shows the electoral results for the 2011 and 2015 parliamentary elections for the political parties that were represented in parliament. In June 2015, before the official cancellation of the peace process, the incumbent AKP obtained 40.87 per cent nationally - its lowest share since first taking power in 2002. This represented a decline of 8.96

percentage points from 2011 whereas the HDP increased its national vote share from 6.54 to 13.12 percent.

This resulted in a huge change in the distribution of parliamentary seats, with the AKP losing 69 seats, and -more importantly- its absolute majority while the HDP gained 45 seats to become the third largest party in parliament. The two parties' respective gains and losses of seats were larger than the changes in their vote shares.

Given that no single party now had an absolute majority, a coalition government needed to be formed. However the AKP, which had suffered from the greatest loss of votes, and the nationalist MHP were reluctant to do so. Moreover, since both parties had quickly suggested the possibility of an early election, the coalition negotiations remained inconclusive for weeks. Consequently, president Erdogan officially ordered an early election decision to be held in November 2015. This time the AKP increased its national vote by 9 percentage points to regain its parliamentary majority.

Critically, between the two elections, the peace process was cancelled after the KCK (The Kurdistan Communities Union), an umbrella organisation for all Kurdish parties, including the PKK, announced on the 11th of July 2015 that it was ending the ceasefire. This led to the recurrence of terrorist attacks in eastern and south eastern Turkey, following which curfews were implemented in various municipalities in the affected regions. These developments make Turkey a suitable case to test the simultaneous impacts of counter-terrorism and terrorism on the electorate.

### 1.5 Data and Methodology

#### 1.5.1 Data

The data for this study were gathered from various sources. Electoral outcomes at the municipality level were provided by the Supreme Election Council of Turkey for the 2011, June 2015 and November 2015 general elections. While data for curfews at the municipality level were obtained from the Official Gazette of the Republic of Turkey, socio-economic data came from the State Planning Organization of the Republic of Turkey's report "Municipalities Socio-Economic Development Ranking Research" (Teşkilatı 2004). Data on terror attacks were gathered from national newspapers. In addition to that the Turkish State–PKK Conflict Event Database (TPCONED) was also used as a comparison<sup>3</sup> (Kibris 2021). Because of a change in municipality law that applied to Diyarbakır in 1993, Van and Şanlıurfa in 2012, there are 4 new municipalities

 $<sup>^3</sup>$ The empirical results are unchanged when TPCONED database is used. See the appendix for the results with TPCONED database.

in Diyarbakır, 3 new municipalities in Şanlıurfa, and 2 new municipalities in Van that were separated from the central municipality of the relevant city. The main difference between the two data sets is, in TPCONED those municipalities in Diyarbakır, Van, and Şanlıurfa were gathered under "Centre" municipality while they were included separately in this study's data set<sup>4</sup>. Due to the same reason, there were five new municipalities in the 2015 elections compared to the 2011 election<sup>5</sup>. As there were no data for these new municipalities in the 2011 election, the parties' vote shares in the corresponding central municipality were applied to each new municipality <sup>6</sup>.

The evolution of terrorist activities in Turkey over different time periods provides a crucial context for understanding the political and social climate surrounding the 2015 elections. In the 2000s, PKK terrorist attacks predominantly targeted security forces. Prior to 2011 election, the occurrence of terrorist attacks was comparatively low, with only six such incidents recorded in 2011. Following this period, a notable decrease in terrorist activities was observed after the ceasefire in 2013, leading to a relatively calm period where no significant attacks were reported. This decrease in terrorist activities contributed to a unique socio-political environment in the lead-up to the 2015 elections. However, the period between the 2015 elections witnessed a dramatic change in both the frequency and severity of terrorist attacks. During this time, Turkey experienced 44 PKK terrorist attacks, resulting in a total of 174 fatalities.

An important aspect of the government's response to terrorism, particularly in the context of this study, is the implementation of curfews. These curfews were predominantly enacted in the most developed cities within the region, which also coincidentally were the locations where terrorist attacks occurred most frequently. The choice of these urban centers for the imposition of curfews suggests a strategic approach by the government, targeting areas of significant economic and social importance, as well as those most affected by terrorist activities. This pattern of curfew implementation not only reflects the government's focus on key urban areas but also indicates a direct response to the spatial distribution of terrorist incidents. The impact of these curfews on the social and economic life of these cities, as well as their potential influence on voting behavior, is a critical dimension to consider in understanding the broader political dynamics of the region during this period.

<sup>&</sup>lt;sup>4</sup>In addition to that, there are only 3 attacks present in one data set and absent in the other.

<sup>&</sup>lt;sup>5</sup>Şanlı<br/>urfa central municipality was divided into three municipalities namely Eyyübiye, Haliliye<br/> and Karaköprü while Van central municipality was divided into two municipalities namely Tuşba and İpekyolu.

<sup>&</sup>lt;sup>6</sup>For example, when including Tuşba and İpekyolu in the data set for the 2011 election, I used the vote shares in Van central municipality. The AKP's vote share in Van central municipality was 43% in 2011, so this was entered into the data set as the AKP's vote share for both Tuşba and İpekyolu. The results remain unchanged if these municipalities are dropped from the data set.

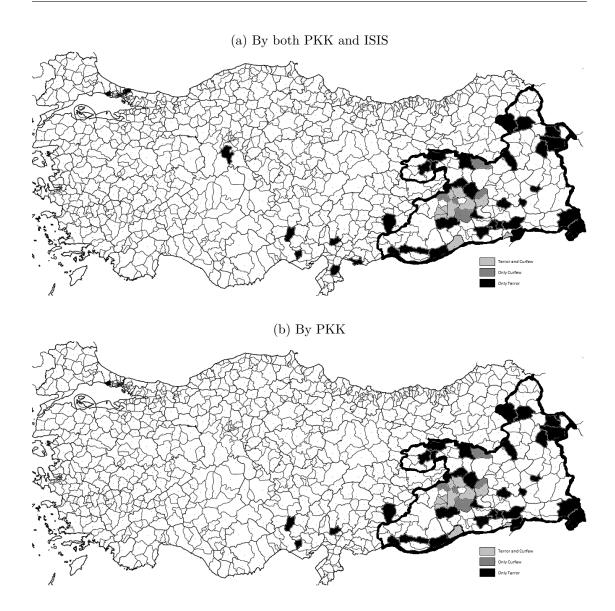


Figure 1.1: Terror Attacks and Curfews in All Municipalities (June-November 2015)

Turkey is a large country with an ethnically heterogeneous population <sup>7</sup>. Because voting patterns vary across ethnic and political groups, it would be difficult to understand the effects of terrorist attacks and curfews by comparing different regions of the country as a whole. Thus, the study focuses on eastern and south eastern Turkey.

There are three reasons for this focus. First Kurdish people living in that particular area constitute the majority of the population (Sirkeci 2000). While Kurdish people represent 14.5 per cent of Turkey's total population, they account for 56.1 per cent in eastern Turkey (Koc et al. 2008) according to the 2003 Turkish Demographic and

 $<sup>^{7}</sup>$ The drawback that was pointed out by Gould and Klor (2010) regarding the comparison of different geographic, historical, ethnic, and religious features is relevant here.

	Incumbent (AKP)	Pro-Kurdish (HDP)	Secular (CHP)	Nationalist (MHP)	Voting Turnout
Panel A					
Mean	49.88	9.95	21.48	14.32	86.05
Std.Dev.	17.88	20.64	15.42	8.19	4.50
N	2910	2910	2910	2910	2910
Panel B					
Mean	31.98	53.42	7.26	3.93	82.65
Std.Dev.	20.24	25.46	14.21	6.34	5.44
N	396	396	396	396	396

Table 1.2: Summary Statistics

Notes: The mean values are votes share of each political party and the voting turnout for the 2011 and two 2015 elections. Panel A accounts for the vote shares of each political party across the country and the voting turnout rate at national level while Panel B corresponds only to the focus region.

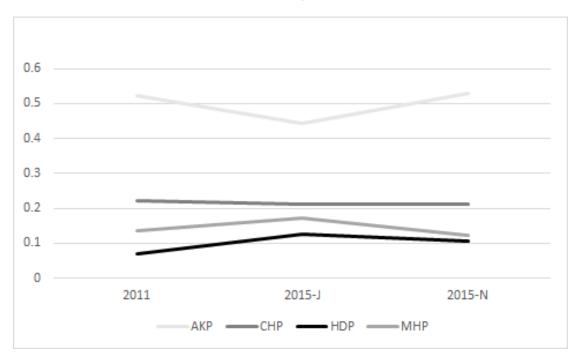
Health Survey (TDHS-2003). Thus, given the conflict between the Turkish military and the PKK, focusing on this region becomes even more important.

Second, most of PKK terrorist attacks (39 out of 44 attacks) and all curfews took place in this region. Considering that votes of the local victims of terrorism and counter-terrorism tend to differentiate (Weintraub et al. 2015; Birnir and Gohdes 2018; Pechenkina et al. 2019), focusing on this region would help to understand the response of locals. Terrorist attacks resulting in fatalities between the two 2015 elections took place in 51 municipalities (44 of them were instigated by PKK) out of 970 municipalities in Turkey. Of these 44 attacks by the PKK, 39 are located in the focus region of this study (132 municipalities). Curfews were implemented in 15 municipalities, all of which were located in the focus region.

Figure 1.1 shows all the municipalities in the country, with those that experienced terrorist attacks and/or curfews between the June and November elections highlighted. The area demarcated by the thick black line shows the focus region of the study. Seven of these terrorist attacks were conducted by ISIS (Islamic State of Iraq and Syria), of which only one was inside the focus region and none of them are included in this study. Figure 1.1(a) shows all terrorist attacks, whether instigated by the PKK or ISIS, while Figure 1.1(b) shows only those instigated by the PKK, which is the focus of this study.

The third reason why this study particularly focuses on eastern and south eastern municipalities is the persistent regional voting patterns in Turkey (Akarca and Başlevent 2011), which fall into three clusters according to Akarca and Başlevent (2011). Cluster 1 follows the Mediterranean, Aegean and Marmara coasts; cluster 2 covers much of the rest of the country apart from eastern and south eastern Anatolia; cluster 3 covers this latter region and overlaps with the study's focus region. While secular parties have

#### All Municipalities



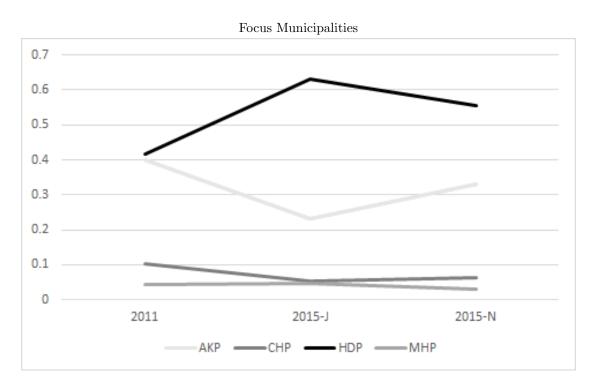


Figure 1.2: Change in Political Parties' Vote Share

been the strongest in cluster 1, conservatives have been the strongest in cluster 2 and pro-Kurdish parties are the strongest in cluster 3 historically. This is important for the parallel trends assumption as different clusters have different voting patterns, and the

parallel trends assumption is essential for using the difference-in-differences method.

The data set contains electoral outcomes for the parliamentary elections in 2011 and 2015 for 132 municipalities in the focus region. The outcome variables are political parties' percentage vote shares and the voting turnout rate. Although the HDP were represented by independent candidates in the 2011 elections, these candidates' votes are aggregated under the HDP. Regarding which attacks to be included, I used those that resulted in fatalities, following Kibris (2011). There were 81 fatal attacks across 39 municipalities. Curfews were implemented across 15 municipalities for a total of 77 days while five municipalities imposed curfews without any terrorist attack. Thus, the control group contains 88 municipalities while 44 municipalities experienced either or both terror attacks and curfews. Out of these 44 municipalities, 10 experienced both attacks and curfews, 5 experienced only curfews, and 29 experienced only attacks.

Table 1.2 shows summary statistics for parties' vote shares and voting turnout rates average across municipalities in the 2011, 2015 June, and 2015 November elections. Panel A reports summary statistics for all municipalities in Turkey while Panel B reports summary statistics for the focus group municipalities. As can be seen from Panels A and B, the incumbent AKP's vote share in the focus region is nearly 20 percentage points less than its share in the country as a whole while the standard deviation is also higher in the focus region. Conversely, the HDP's mean vote share in the focus region is more than five times its national average. Their combined vote share in the focus region is more than 80%. The mean vote share in the focus region of the secular CHP is only one third of its national average while the nationalist MHP's share is even lower. Furthermore, main hypotheses of this study relate to the incumbent, and party associated with perpetrators of terror attacks. As a result, the secular CHP and the nationalist MHP are not going to be included in the main analysis. Finally, compared to the country as a whole, the mean voting turnout rate is also less and its standard deviation is higher in municipalities in the focus region.

Figure 1.2 shows how the four parties' vote shares developed over time, both in all municipalities and the focus municipalities. Between 2011 and the first election in 2015, during the peace process support for the AKP decreased sharply overall. However, it rebounded even beyond the level at the 2011 election after the peace process collapsed. Conversely, support for the HDP increased during the peace process and decreased after its cancellation but stayed above its 2011 level. Regarding the focus municipalities, there was a sharp decrease in the AKP's support but a sharp increase in the HDP's support.

<sup>&</sup>lt;sup>8</sup>In the extended analysis the secular CHP and the nationalist MHP will also be included where the socioeconomic variables are introduced in addition to the main analysis.

After the peace process collapsed, the AKP's support rebounded to less than its 2011 election level whereas the HDP's support remained higher than its 2011 level.

#### 1.5.2 Empirical strategy

The difference-in-differences method is used to estimate the effect of a treatment by comparing changes in outcomes over time between a treatment group and a control group. The parallel trend assumption is the most critical assumption of difference-in-differences models. That is, in the absence of the treatment, the difference between the 'treatment' and 'control' groups would remain constant over time. Violation of this assumption leads to biased estimation of the causal effect. The context of this study is particularly unique for applying difference-in-differences method as the time between the two elections in 2015 was remarkably short. During this five month period, the main political events were the terror attacks and counter-terrorism measures after the peace process collapsed. The baseline regression of the analysis is as follows:

$$Y_{it} = \beta_1 (Terror)_{it} + \beta_2 (Curfew)_{it} + \beta_3 (Terror * Curfew)_{it} + \gamma_i + \delta_t + \epsilon_{it}$$
 (1.1)

where *i* indexes municipalities and *t* indexes time; *Y* is the outcome variable the percentage vote shares of political parties and voting turnout rate on a 0-100 scale at the municipality level;  $\gamma_i$  are municipality fixed effects;  $\delta_t$  are time fixed effects (election fixed effects). Terror, Curfew, and Terror\*Curfew are dummy variables denoting the group each municipality belongs to (Terror, Curfew, and Terror\*Curfew = 0 if a municipality belongs to the control group and 1 if a municipality belongs to the treatment group);  $\epsilon_{it}$  is the error term while  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  are the key parameters.

Following hypothesis (H1) in the theory section,  $\beta_1$  is expected to be negative for the AKP as terror attacks throw doubt on the incumbent's competence. Whereas, it is expected to be positive for the HDP as terror attacks can increase support for the perpetrators if that population already perceive themselves to have a reason to support the perpetrators.  $\beta_2$  is expected to be negative for the AKP as electorates affected by curfews but not terror attacks are argued to hold the incumbent responsible for the interruption of daily life (H2).  $\beta_3$  is expected to have more complex effects on support for both the AKP and the HDP due to the argument that where terrorism is present, then counter-terrorist measures may be deemed to be appropriate rather than just inconvenient, hence the support for the AKP and the HDP may increase or decrease (H3).

The second specification of the model investigates whether there are any spillover effects of terror attacks, curfews and if the intensity of terror attacks and curfews matter. The second specification is as follows:

$$Y_{it} = \beta_1 (Terror)_{it} + \beta_2 (Curfew)_{it} + \beta_3 (Terror * Curfew)_{it}$$

$$+ \beta_4 (Curfew \ Neighbour)_{it} + \beta_5 (Curfew \ Intensity)_{it}$$

$$+ \beta_6 (Terror \ Neighbour)_{it} + \beta_7 (Terror \ Intensity)_{it} + \gamma_i + \delta_t + \epsilon_{it}$$
 (1.2)

where i indexes municipalities; t indexes time;  $Curfew\ Neighbour$  and  $Terror\ Neighbour$  are dummy variables set equal to one if a municipality is the neighbour of a municipality that experienced a terror attack or implemented a curfew respectively.  $Terror\ Intensity$  is measured as the number of people died in terror attacks and  $Curfew\ Intensity$  is measured as the number of days that the curfew lasted.

 $\beta_4$  is anticipated to have different effects on the support for both the AKP and the HDP. This arises from the possibility that counter-terrorist measures may be deemed as appropriate due to not being affected directly from the consequences of curfews. Hence, there would be no negative impact on the support for the AKP. Conversely, the support for the HDP may decrease if the implementation of curfews are anticipated as a response to terror attacks in the region.  $\beta_5$  and  $\beta_7$  are expected to have similar effects as  $\beta_2$  and  $\beta_1$  as a higher frequency of terror attacks and longer curfews will exert a more pronounced impact on voting behaviour following hypothesis (H5). Finally,  $\beta_6$  is expected to be negative for the AKP and positive for the HDP. Even though municipalities are not directly affected by terror attacks, such attacks in the region may throw doubt on the incumbent's competence and can potentially increase support for the party associated with the perpetrators.

The third specification is made as a robustness check to see whether there is an effect prior to intervention:

$$Y_{it} = \beta_1 (Pre\ Terror)_{it} + \beta_2 (Pre\ Curfew)_{it} + \beta_3 (Pre\ Terror * Curfew)_{it}$$
$$+ \beta_4 (Terror)_{it} + \beta_5 (Curfew)_{it} + \beta_6 (Terror * Curfew)_{it} + \gamma_i + \delta_t + \epsilon_{it}$$
(1.3)

where i indexes municipalities, t indexes time, and the *pre-variables* are placebo dummy variables encapsulating future treatment status. These are equal to 1 if a municipality experienced a terror attack, a curfew or both during the following election period.

For example, if a municipality implemented a curfew between the June and November elections, pre-variable would be 1 for the June 2015 observation.

Finally, to investigate which segment of the population is more responsive in terms of voting to terrorism and counter-terrorism, socioeconomic variables are included as an interaction to terrorism and counter-terrorism, as in the following equation:

$$Y_{it} = \beta_1(Terror)_{it} + \beta_2(Curfew)_{it} + \beta_3(Terror * Curfew)_{it}$$

$$+ \beta_4((Terror)_{it} * (\sum_{j=1}^{3} (Socioeconomy_j)_i - \overline{Socioeconomy_j})$$

$$+ \beta_5((Curfew)_{it} * (\sum_{j=1}^{3} (Socioeconomy_j)_i - \overline{Socioeconomy_j})$$

$$+ \beta_6((Terror * Curfew)_{it} * (\sum_{j=1}^{3} (Socioeconomy_j)_i - \overline{Socioeconomy_j}) + \gamma_i + \delta_t + \epsilon_{it}$$

$$(1.4)$$

where j indexes socioeconomic variables for urbanization rate, literacy rate and unemployment rate; i indexes municipalities; t indexes time;  $\overline{Socioeconomy_j}$ , is the mean level of each socioeconomic variable in all municipalities and  $(Socioeconomy_j)_i$  is the level of each socioeconomic variable in municipality i at 0-100 scale.

Following hypothesis (H6)  $\beta_4$  to  $\beta_6$  are expected to have the same sign as the corresponding coefficient  $\beta_1$  to  $\beta_3$  in municipalities with higher socioeconomic standards.

#### 1.6 Results

Table 1.3 presents the estimation results for the basic specification. While there are significant effects for *Terror* and *Curfew* on the incumbent party (AKP), the pro-Kurdish party (HDP), and voting turnout, there is no significant effect of the interaction term *Terror-Curfew*.

Terror attacks are estimated to decrease the AKP's vote share by 3.2 percentage points in the afflicted municipalities while increasing the HDP's vote share by 3.67 percentage points and voting turnout by 1.35 percentage points. These findings are in line with the discussion in the theory section (H1), as terror attacks are estimated to decrease support for the incumbent and increase support for the party associated with perpetrators. It is also consistent with the argument that terrorist attacks can damage the political standing of incumbent parties (Bali 2007; Gassebner et al. 2008; Kibris 2011; Getmansky

and Zeitzoff 2014). Arguably, therefore, local victims of terror punished the AKP for the government's hawkish position. This is consistent with the case of Colombia where propeace candidate performed better in municipalities with higher violence in presidential election (Weintraub et al. 2015) but contradicts with the case of Peru, where local victims of terrorist activities punished parties associated with the perpetrators (Birnir and Gohdes 2018). On the other hand, the estimated increase in supports for the party associated with perpetrators support the theoretical claim of Bueno de Mesquita and Dickson (2007).

The imposition of curfews in municipalities that did not experience terrorist attacks (Terror = 0) is estimated to decrease the AKP's support even more than terrorist attacks. The AKP's vote decreased by 4.72 percentage points following a curfew, which is almost a 15 per cent decline, considering the AKP's mean vote share (31.98) across all municipalities in the focus region. These results are indirectly consistent with the theoretical arguments of Rosendorff and Sandler (2004) De Mesquita (2005), Bueno de Mesquita and Dickson (2007), who argue that harsh responses to terrorism and government crackdowns may increase support for the party associated with the perpetrators. In Turkey, harshly-perceived responses to terrorism did not empirically directly increase the HDP support, but indirectly benefited it by decreasing the AKP's votes – its political rival party in the region. On the other hand the estimation results are directly consistent with Pechenkina et al. (2019) who find that people experiencing indiscriminate measures tend to blame the government for indiscriminate attacks regardless of rebel provocation. Curfews are also estimated to cause an increase in voting turnout by 2.99 percentage points. Considering that the AKP's vote share decreased, the voting turnout rate may have risen because local people reacted to the counter-terrorism measures by mobilizing against the curfew.

The impact of the interaction term *Terror-Curfew* is estimated to be insignificant. Nonetheless, it is interesting that the estimated coefficient signs of *Terror-Curfew* for the AKP and the HDP are opposite to the sign for *Terror* for in each case. That is, although the interaction term is not statistically significant, its estimated impact is positive for the AKP but negative for the HDP. More specifically, implementing curfews in municipalities where terror attacks happen possibly clears away the significant impacts of terror attacks for both parties, which may also explain the reasoning behind the government's implementation of curfews. Although the AKP lost support in those municipalities that implemented curfews without terrorist attacks, the estimates suggest that, by implementing curfews, the AKP regained support of voters that it would have lost because of terrorist attacks. This eliminates the positive impact of terror attacks on support for their rival in those municipalities as well as the negative impact on their own support.

 $\overline{\text{HDP}}$ AKP Voting Turnout (Incumbent) (Pro-Kurdish) -3.204\*\* 3.670\*\* 1.351\* Terror (1.15)(1.28)(0.61)-4.723\* Curfew 0.6572.991\* (2.14)(2.76)(1.34)Terror-Curfew 3.574-3.786-2.909(2.39)(3.03)(1.58)N 396 396 396 R-sq 0.6720.7100.209Election FE Yes Yes Yes Municipality FE Yes Yes Yes

Table 1.3: Baseline Estimation

Notes: Each column reports estimates of Equation (1.1), in which the dependent variables are the vote share of the incumbent (AKP), the pro-Kurdish (HDP) political party, and the voting turnout at municipality level. In parentheses are robust standard errors. \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

Table 1.4 augments the benchmark specification to estimate the spillover and intensity effects associated with terror attacks and curfews. There were 34 municipalities adjacent to the 15 municipalities that imposed a curfew and 84 municipalities adjacent to the 39 municipalities that experienced terrorist attacks. Thus, taking into account the impact of curfews on neighbouring municipalities can further reveal their significance if there are any spillover effects. An increase is estimated in the direct impacts of terrorist attacks and curfews after taking into account spillover and intensity effects. The direct impacts of terror attacks on the AKP increased (in absolute terms) from -3.2 to -3.8, similarly the distinct impact of terror attacks on the HDP increased from 3.67 to 4.77. In addition, the distinct impacts of curfews (in absolute terms) on the AKP increased from -4.72 to -5.4.

There are no significant effects of Terror-Neighbour and Terror-Intensity for both political parties. An important point regarding the spillover effects of terror attacks is that there are 84 neighbouring municipalities affected by terror attacks including some of the Terror-treated municipalities. Once the municipalities that implemented curfews and their neighbouring municipalities are accounted for, this leaves a less sufficient number of control municipalities. The opposite signs of Terror-Neighbour for both political parties are in line with the baseline estimations. Terror-Neighbour is negative for the AKP and positive for the HDP suggesting that although it is insignificant it has the same direction with Terror.

On the other hand, the coefficient estimate for *Curfew-Neighbour* is significant for the HDP. *Curfew-Neighbour* is estimated to decrease the vote share of the HDP's votes by

Pro-Kurdish Incumbent Voting Turnout (AKP) (HDP) 4.770\*\*Terror 1.405\* -3.805\* (1.79)(1.51)(0.70)Curfew -5.399\* 2.186 1.933 (2.49)(2.90)(1.22)Terror-Curfew 4.100-4.755-3.387\* (2.68)(2.17)(1.37)-3.773\*\* Curfew-N 0.6781.772(1.48)(1.20)(0.57)Curfew-I -0.09620.2090.147(0.17)(0.18)(0.10)Terror-N -1.1831.295 1.265\*(1.13)(1.41)(0.53)Terror-I 0.110 -0.179-0.0361(0.24)(0.18)(0.08)N 396 396 396 R-sq 0.6750.7150.228Election FE Yes Yes Yes Yes YesYesMunicipality FE

Table 1.4: Spillover and Intensity Effects

Notes: Each column reports estimates of Equation (1.2), in which the dependent variables are the vote share of the incumbent (AKP), the pro-Kurdish (HDP) political party, and the voting turnout at municipality level. -N, -I refer to neighbouring municipalities, and intensity. In parentheses are robust standard errors. \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

3.77 percentage points. In line with the argument that when a municipality is not directly affected by the negative consequences of curfews, counter-terrorist measures may be perceived as appropriate rather than just inconvenient. As a consequence, the support for the HDP is estimated to decrease. Although terror attacks are estimated to increase the HDP's support by 4.77 percentage points, the interaction term *Terror-Curfew* shows that the implementation of curfews potentially reduces this effect while also decreasing the HDP's support in neighbouring municipalities. Overall, counter-terrorism measures are estimated to decrease the vote share of the party that is associated with the perpetrators as implementation of curfews decreases the HDP support by 3.77 in 34 municipalities adjacent to the 15 municipalities that imposed a curfew. The AKP indirectly gains from the spillover effects of curfews, which decrease support for its rival. Thus, the AKP could use impact of curfews in attacked and neighbouring municipalities as a strategic tool.

Curfew-Intensity has no significant impact on any political party. However the sign of

the coefficient estimate for *Curfew-Intensity* is negative for the AKP and positive for the HDP. Although the estimated impact of *Curfew-Intensity* is insignificant, its sign is in line with the theoretical arguments of De Mesquita (2005); Bueno de Mesquita and Dickson (2007). By reducing economic opportunity and creating negative externalities for local people, longer curfews may increase support for the HDP while decreasing support for the AKP.

The estimated negative impact of *Terror-Curfew* on voting turnout becomes significant when intensity and spillover effects are included in the regression. It is estimated to decrease voting turnout by 3.32 percentage points (slightly bigger than it is at Table 1.3), suggesting that local voters become reluctant to vote. On the other hand, the estimated positive effect of *Curfew* on voting turnout becomes insignificant in Table 1.4.

Considering that the AKP, the HDP, and the PKK's imprisoned leader were conducting the peace process together, local victims of terrorism seem more likely to blame the ruling AKP for the cancellation and for the return of terrorist attacks. Thus, local victims of terror attacks react by supporting the HDP and rejecting the AKP.

Curfews in the attacked municipalities mute the impact of *Terror* and change the sign of its impact on both the AKP's and the HDP's vote shares while reducing voting turnout, suggesting that locals become reluctant to vote. Thus, local victims of both terror attacks and curfews appear to blame both parties for the cancellation. Moreover, due to their negative spillover effects on the HDP, curfews are estimated to benefit the AKP.

To understand the underlying mechanism, the impact of military operations and armed clashes during curfews should be taken into account. These clashes were highly destructive, potentially suppressing the electorates' choices against the HDP in neighboring municipalities. The devastation and disruption caused by these military operations and clashes during curfews could have led to a sense of disenchantment or fear among the electorate, thereby influencing their voting behavior. This alienation, coupled with the physical and psychological barriers imposed by the curfews, might have hindered the voters' ability to freely express their political preferences, particularly against parties perceived as being sympathetic to the PKK.

Furthermore, the destructive nature of these clashes, and the subsequent hardships faced by the local population, may have fostered a sentiment of resentment against the PKK. As the region was already grappling with significant challenges, the additional strain of armed conflicts could have amplified the electorate's aversion to continued instability. This aversion could manifest in a negative perception of the HDP, seen as indirectly associated with the PKK and its actions, thereby affecting electoral outcomes.

This argument would explain the insignificant positive impact on the AKP and negative impact on the HDP of curfews in attacked municipalities. The presence of curfews and the intensity of clashes likely created a complex socio-political environment, where the electorate's response was shaped not only by immediate security concerns but also by a broader discontent with the ongoing conflict and its implications for their daily lives. It is also consistent with the reluctance of locals to vote during curfews in the attacked municipalities, as the combination of physical restrictions and a climate of fear and frustration could have significantly dampened voter turnout and altered voting patterns.

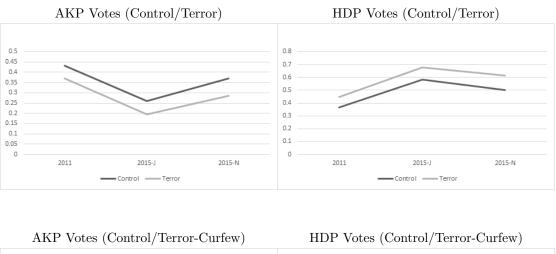
#### 1.6.1 The parallel trend assumption

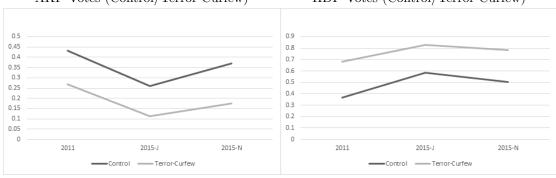
Figure 1.3 shows the trends of the AKP and the HDP's vote shares for the control and treatment groups with regards to *Terror*, *Curfew*, and *Terror-Curfew* in the 2011, 2015 June and November elections for the focus region.

An easy way to see if the results are robust is a placebo test by including leads of the treatment as in equation (1.3). To ensure that the model is valid, the coefficients on all pre-variables (*Pre-Terror*, *Pre-Curfew*, *Pre-Terror\*Curfew*) of the treatment in equation (1.3) should be insignificant. To test if the presented results in Table 1.3 and 1.4 are robust, pre-variables are included and a placebo test is conducted. Table 1.5 shows the results with pre-variables.

As shown in Table 1.5, coefficients for the pre-variables are estimated to be insignificant apart from the *Pre-Curfew* coefficient for voting turnout. Because *Pre-Curfew* is significant for voting turnout, the impact of curfew on voting turnout becomes questionable although the impact of *Curfew* on it remains significant. This indicates that increasing voting turnout may partly have captured a trend from the previous period. It may have been caused by other unexamined factors rather than curfews. For the party vote shares, which are the main results of the chapter, none of the placebo tests are estimated to be statistically significant.

The estimation results in Table 1.5 also show that the estimated negative impact of curfews on the AKP's support becomes insignificant after including pre-variables with the treatments while the sign of the coefficient estimate for *Curfew* remains negative and the magnitude is slightly lower than in Table 1.3. Although the coefficient estimate of *Curfew* loses its significance when placebo treatments are included, the estimation results confirm that the baseline estimations are robust.





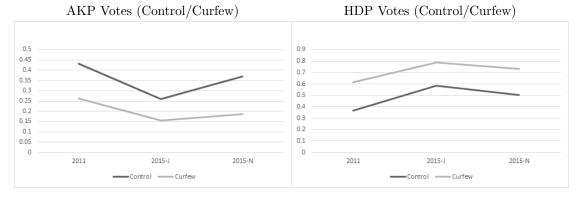


Figure 1.3: Trends for the AKP and the HDP Vote Shares

Notes: Figure 1.3 illustrates the vote shares of the AKP and the HDP, in attacked municipalities, curfew imposed attacked municipalities, and curfew imposed non-attacked municipalities.

The results for *Terror* still maintain their significance. The estimated impact of terrorist attacks increased in terms of magnitude for both the HDP and the AKP. *Terror* is estimated to increase the HDP's vote share by 4.18 percentage points and decrease the AKP's vote share by 3.5 percentage points. *Terror* is also estimated to increase voting turnout by 1.43 percentage points.

The impact of *Terror-Curfew* on the AKP and the HDP is also consistent with the baseline estimation. The signs of *Terror-Curfew* are the opposite to the signs of *Terror* for each party but insignificant. The significant negative impact on voting turnout is

	Incumbent	Pro-Kurdish	Voting Turnout
	(AKP)	(HDP)	voting furnout
P-Terror	-0.803	1.130	0.919
	(1.07)	(1.30)	(0.60)
P-Curfew	3.601	-3.473	3.703**
	(1.96)	(2.23)	(1.10)
P-Terror-Curfew	-3.747	-1.304	-2.079
	(2.35)	(2.35)	(1.29)
Terror	-3.503**	4.184**	1.435*
	(1.22)	(1.34)	(0.62)
Curfew	-2.886	-0.214	4.622*
	(1.92)	(3.11)	(1.79)
Terror-Curfew	2.083	-3.072	-4.724*
	(2.20)	(3.37)	(2.01)
N	396	396	396
R-sq	0.675	0.715	0.240
Election FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes

Table 1.5: Placebo Test

Notes: Each column reports estimates of Equation (1.3), in which the dependent variables are the vote share of the incumbent (AKP), the pro-Kurdish (HDP) political party, and the voting turnout at municipality level. P- refers to pre-variables of Terror, Curfew, and Terror-Curfew. In parentheses are robust standard errors. \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

consistent with the results in Table 1.4. *Terror-Curfew* is estimated to decrease the voting turnout by 4.72 percentage points.

#### 1.6.2 Socio-economic heterogeneity

Finally, Table 1.6 presents estimates for the conditional impacts of different socio-economic variables on voting under terrorism and counter-terrorism. Panel A, B and C correspond to the interactive effects of urbanization, literacy and unemployment respectively. These estimation results will contribute to the existing literature by examining the impact of terrorism and counter-terrorism on voting behaviour, while taking into account the impact of the socio-economic variables. The findings provide information on which segments of the population are more responsive to terror attacks and curfews.

Although the main focus of Table 1.6 is the interaction of *Terror*, *Curfew*, and *Terror*. *Curfew* with socio-economic variables, the changes in the coefficient estimates for *Terror*, *Curfew* and *Terror-Curfew* also need to be interpreted. *Terror-Curfew* differs most in panels A, B, and C compared to the baseline estimation as it is significant for the AKP

Table 1.6: Socio-economic Variables

	Incumbent (AKP)	Pro-Kurdish (HDP)	Secular (CHP)	Nationalist (MHP)	Voting Turnout
Panel A	(11111)	(IIDI)	(0111)	(11111)	
Terror	-3.350**	3.539**	0.217	-0.711	1.326*
	(1.24)	(1.27)	(1.14)	(0.84)	(0.65)
Curfew	-4.528***	4.024	-1.923	1.204**	4.379**
	(1.05)	(2.50)	(1.95)	(0.37)	(1.43)
Terror-Curfew	4.989**	-7.547*	2.256	0.633	-6.135***
	(1.49)	(2.96)	(2.25)	(0.80)	(1.59)
Terror-Urb	0.0308	0.0245	-0.0612*	0.00646	0.00191
	(0.05)	(0.05)	(0.03)	(0.04)	(0.03)
Curfew-Urb	0.0266	0.429*	-0.0782	$0.002\dot{2}2$	0.177**
	(0.25)	(0.19)	(0.09)	(0.01)	(0.07)
Terror-Curfew-Urb	-0.135	-0.426*	0.168	-0.00898	-0.0800
	(0.26)	(0.21)	(0.1)	(0.03)	(0.08)
Panel B	,	, ,		,	, ,
Terror	-3.029*	3.721**	-0.176	-0.814	1.340*
	(1.16)	(1.35)	(1.28)	(0.82)	(0.61)
Curfew	-4.475***	6.916***	-5.225***	1.266***	1.629
	(0.88)	(0.87)	(1.29)	(0.37)	(1.77)
Terror-Curfew	2.967*	-10.22***	6.574***	0.746	-1.233
	(1.37)	(1.54)	(1.78)	(0.81)	(1.94)
Terror-Lit	0.153	0.0402	-0.0719	-0.124*	0.0108
	(0.1)	(0.12)	(0.12)	(0.06)	(0.07)
Curfew-Lit	0.0373	0.844***	-0.525***	0.00693	-0.182
	(0.32)	(0.24)	(0.12)	(0.01)	(0.19)
Terror-Curfew-Lit	-0.230	-0.929**	0.623***	0.114	0.319
	(0.34)	(0.29)	(0.17)	(0.06)	(0.21)
Panel C					
Terror	-3.422**	3.701**	0.0716	-0.702	1.317*
	(1.18)	(1.33)	(1.27)	(0.81)	(0.63)
Curfew	-4.671*	0.993	-1.331	1.182**	3.202**
	(1.92)	(2.44)	(1.49)	(0.37)	(1.11)
Terror-Curfew	5.200*	-5.178	1.946	0.648	-5.506***
	(2.38)	(2.98)	(1.99)	(0.79)	(1.27)
Terrorism-Un	0.181	-0.0226	-0.139	0.0205	0.0380
	(0.13)	(0.16)	(0.14)	(0.07)	(0.08)
Curfew-Un	0.201	0.689	-0.0507	-0.00597	0.456***
	(0.48)	(0.55)	(0.19)	(0.01)	(0.09)
Terror-Curfew-Un	-0.593	-0.517	0.243	-0.0152	-0.139
	(0.52)	(0.59)	(0.24)	(0.07)	(0.14)
N	396	396	396	396	396
Election FE	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes

Notes: Each column reports estimates of Equation (1.4), in which the dependent variables are the vote share of the incumbent (AKP), the pro-Kurdish (HDP) political party, the secular (CHP) political party, the nationalist (MHP) political party and the voting turnout at municipality level. In parentheses are robust standard errors. Panel A, B, and C report results for urbanization, literacy and unemployment rate respectively. \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

in all panels and for the HDP in panel A and B. This indicates that curfews in attacked municipalities reverse the electoral effect of terror attacks for both political parties once the socio-economic differences (urbanization and literacy) of the municipalities are included in the regression. This suggests again that if curfews are not implemented as a response of terror attack(s), locals blame the incumbent for the interruption of daily life. On the other hand, if this interruption is perceived to aim security, it increases the support for the incumbent. In Panel B, the positive estimated impact of Terror-Curfew is less for the AKP and the negative estimated impact on the HDP is more. In addition to that the support for the CHP become significant, and its magnitude is quite high considering the CHP's vote share in the region. This suggest that even if people are convinced that implementation of curfews was necessary they prefer to vote for the left-wing opposition rather than the AKP<sup>9</sup>.

The interaction terms of treatments with literacy and urbanization rates are estimated to affect how the HDP's voters respond to Curfew and Terror-Curfew. More specifically, the conditional effect of curfew is stronger in more urbanized and literate municipalities, with a one-percentage-point increase in mean urbanization rate and literacy rate corresponding to an increase in the conditional effect of curfews on the HDP's support of 0.43 and 0.84 percentage points, respectively. Similarly, when curfews are implemented in attacked municipalities, a one-percentage-point increase in urbanization rate and literacy rate corresponds to a decrease in the conditional effect of curfews for the HDP's support of 0.43 and 0.93 percentage points, respectively. The parallel results of urbanization and literacy is not surprising considering that literacy rates are higher in urbanized areas. In addition, Curfew and Terror-Curfew leads more literate voters to make an exchange within the left wing. Curfew is estimated to increase the HDP's support among literate voters, while Terror-Curfew is estimated to decrease it. Almost two thirds of this support comes from and goes to the CHP as the interaction terms of Curfew and Terror-Curfew with literacy are estimated at -0.53 and 0.61 for the CHP. The impact of Curfew favors the HDP when it interacts with literacy and urbanization, but disfavors it if a curfew was implemented in response to terror attack(s). This suggest that urbanized and literate population tend to support the pro-Kurdish political party against the indiscriminate implementation of curfews. On the other hand, they decrease their support if curfews are implemented as a response of terror attacks. However, they still do not vote in favour of the incumbent. Instead they vote for the other left-wing opposition party suggesting that curfews don't find any support among urbanized and literate population. Finally, there is no significant impact of unemployment for any political parties regarding voters' responses to Terror, Curfew, and Terror-Curfew.

<sup>&</sup>lt;sup>9</sup>Please see the appendix for the impact of terror attacks and curfews on the CHP.

#### 1.7 Conclusion

The effects of terrorism and counter-terrorism on electoral outcomes have been explored in both economics and political science, especially since the 9/11 terror attacks. However, while the effect of terrorism on voting behaviour has been investigated both empirically and theoretically, the effect of counter-terrorism has been investigated only theoretically. Accordingly, this study contributes to the literature by providing empirical evidence for the impact of counter-terrorism as well as terrorism on voting behaviour.

The findings suggest that terror attacks can increase support for the political party associated with the perpetrators and decrease support for the national incumbent. However the impacts of terror attacks change depending on the presence of counter-terrorist measures such as curfews. As a counter-terrorism measure, curfews are estimated to clear away the effects of terror attacks on both the political party associated with the perpetrators and the national incumbent when implemented in municipalities that experienced terror attacks. On the other hand, when curfews are implemented in non-attacked municipalities, they are estimated to decrease support for the national incumbent but have no effect on the party associated with the perpetrators. Curfews are also estimated to have spillover effects on the political party associated with the perpetrators by decreasing its vote share in neighbouring municipalities. Counter-terrorism measures like curfews are estimated to have sizable effects as they affect the vote share both directly (4.72) percentage points decrease for the national incumbent) and indirectly (3.77 percentage points decrease for the pro-Kurdish political party in neighbouring municipalities). It is quite possible that unobserved heterogeneity in counter-terrorism measures explains why the literature to date on the electoral consequences of terrorism have been quite mixed.

The results on socio-economic variables provide new insights regarding the departure point of future research on the mechanisms. Results suggest that curfews in both attacked and non-attacked municipalities have stronger effects in more urbanised and literate municipalities. Hence findings on socio-economic variables can prepare the ground to explore the complex mechanism on how and through which channels terrorism and counter-terrorism affect the electorate's political preferences.

Turkey's parliamentary elections in 2018 following the coup attempt in 2016, were held under a state of emergency, during which the AKP government conducted further counter-terrorist measures in the south eastern municipalities. These municipalities overlap with those that implemented curfews between the two elections in 2015. Thus, the results on the impacts of curfews can also be the departure point of future research which focuses on the case of Turkey.

# Chapter 2

# Money Has No Religion: Campaign Contributions and Ideology in the US

#### 2.1 Introduction

The political system of the United States has a lengthy history of allowing individuals, corporations, and other entities to contribute to political campaigns. These contributions can take various forms, such as direct contributions to candidates or political parties or contributions to political action committees (PACs) that support specific candidates or issues. However, the effects of these contributions on politics, politicians, and corporation financial returns are not entirely understood. While some people view campaign contributions as a way for corporations to influence public policy in their favour, others argue that corporations should also have a right to express their political views. Nonetheless, critics maintain that allowing corporations to make campaign contributions undermines the democratic process and gives them undue influence over elected officials.

Researchers have explored the motivations behind political contributions, the effect of these contributions on the outcomes of elections and public policies, and the relationship between campaign contributions and the returns of contributors. Increasing evidence suggests that campaign contributions have a direct impact on policy outcomes related to contributors' interests, but research to date has generally neglected the question of whether such contributions affect the broad ideological stance of politicians. This chapter aims to provide empirical evidence on the impact of campaign contributions on the ideology of the US House of Representatives. By analyzing campaign contributions

data and ideology scores that are produced from representatives' voting records, the study will explore the impact of contributions on representatives' ideology.

This study examines the impact of campaign contributions on the ideology of representatives across the 107th to 116th US Congresses, spanning the years 2001-2021. The dataset comprises 20,666 campaign contributions made to 610 representatives who have been elected at least three times, along with ideology scores of representatives for each congress. Campaign contributions data are gathered from the Center for Responsive Politics<sup>1</sup>, while ideology scores are obtained from Lewis et al. (2018). Based on these data sources, the study explores two hypotheses: the ideological hypothesis and the stabilising hypothesis.

Specifically considering the contributions ratios of specific donors to Republican and Democrat representatives, the findings reveal that money coming from donors who typically contribute to the Republican party, "Republican money", and who typically donate to both political parties, "split-ticket money", have a negative effect on the ideology score of representatives, indicating that these types of contributions make representatives more liberal, or *less* right-wing on economic matters. Interestingly, this effect is primarily driven by Republican representatives, suggesting that donors who typically contribute to Republicans and to both political parties pull Republican representatives towards a more liberal ideology on economic issues. These findings are consistent with the stabilising hypothesis, which is defined below.

Furthermore, the study takes into account different sub-sets, and the results demonstrate that money coming from donors who typically contribute to the Democrat party, "Democrat money", has a positive impact on the ideology score, implying that "Democrat money" makes representatives more conservative on economic matters. Hence the overall impact of money on representatives surprisingly, is centripetal. The ideology score of Republican representatives vary between 0 to 1 and the ideology score of Democrat representatives vary between -1 to 0 and estimation results show that an extra million dollars of "Republican money" and "split-ticket money" decrease the ideology score of representatives by 0.1 points. The magnitude of the impact of both "Republican money" and "split-ticket money" are higher for the subset of candidates who are less subject to political competition. On the other hand, results focusing on representatives facing greater political competition suggest that an extra million dollars of "Democrat money" increases the ideology score of the representatives by 0.07 points, again highlighting a novel moderating impact of political campaign contributions.

The chapter is organised as follows. Section 2 provides a review of the literature. Section 3 presents the hypotheses and links them to the theoretical debates. Section 4 introduces

<sup>&</sup>lt;sup>1</sup>www.opensecrets.org

the variables and data sources and discusses the identification strategy and methodology. Section 5 presents and evaluates the results generated from the analysis. Section 6 draws some conclusions derived from the analyses and highlights the importance of the study.

#### 2.2 The literature

Campaign contributions have been growing dramatically over recent decades. This stimulated academic interest in understanding whether and how policy changes as a result of these contributions.

The motivations for campaign contributions include investment, agency (Aggarwal et al. 2012), and consumption (Gordon et al. 2007). Studies by Cooper et al. (2010); Huber and Kirchler (2013); Arvate et al. (2013); Boas et al. (2014) have found that corporations are potentially motivated by the expectation of favorable returns from their political contributions. While Arvate et al. (2013); Boas et al. (2014) provide empirical evidence from Brazil, Cooper et al. (2010) show that campaign contributions and future returns of firms are positively correlated by constructing measures using firm-level contributions to US political campaigns from 1979 to 2004. In addition to Cooper et al. (2010), Huber and Kirchler (2013) find that companies experienced abnormal positive post-election returns by focusing on US presidential elections from 1992 to 2004. Hence, different studies suggest that campaign contributions can be seen as an investment rather than just a simple act of agency. Financial returns are the result of favourable policies enacted by elected politicians. This favourable policy could take specific regulatory form, and could also stem from changed general policy, as represented by candidates' broad ideological stances.

The existing literature on campaign contributions and their influence on policy presents a duality that remains unresolved. From a theoretical perspective many studies show how and through which channels campaign contributions may affect policy outcomes (Campante 2011; Fox and Rothenberg 2011; Chamon and Kaplan 2013; Bouton et al. 2018; Battaglini and Patacchini 2018; Schnakenberg and Turner 2021), while Gordon et al. (2007) show that even if campaign contributions are a form of investment, they are often purchases of 'good will', rather than explicit promises. This 'good will' could take the form of changes in politicians' broad ideological stances that may be aligned with the donors preferences rather than specific legislation. Similarly Grosser et al. (2013), highlight another limitation in their experimental work by revealing that when the firm and candidates interact only once, political influence does not materialize.

Campante (2011) analyses the impact of campaign contributions on redistributive policies and finds that contributions have a significant impact on redistributive policies, while Chamon and Kaplan (2013) suggest that interest groups make campaign contributions to signal their strength and ability to inflict political harm. Fox and Rothenberg (2011) present a theoretical model to explain the relationship between campaign contributions and policymaking, and posit that interest groups will contribute more to politicians who have a higher probability of winning the election and who are more likely to support their policy goals. Politicians, in turn, are more likely to support the interests of their contributors, but this support is not a result of a direct contractual relationship between the two parties. Battaglini and Patacchini (2018) find that contributors who have personal connections to legislators have a greater influence on policymaking compared to those without connections. Bouton et al. (2018) develop a theory of small campaign contributions and argue that small contributions are driven by a desire for political influence, which can be obtained through access to politicians. Schnakenberg and Turner (2021) show that interest groups that contribute to a candidate's campaign are more likely to receive favorable policy outcomes if that candidate wins the election. Moreover, interest groups that contribute to multiple candidates are more likely to receive favorable policy outcomes regardless of which candidate wins the election. Thus, these studies have proposed a different set of mechanisms, all of which posit campaign contributions as a potential tool for acquiring political favors.

Although Aggarwal et al. (2012) and more recently Fowler et al. (2020) find no evidence that corporate campaign contributions buy significant political favors, different studies support the theoretical claims of the above studies and provide empirical evidence that campaign contributors seek policy influence (Fouirnaies 2018; Powell and Grimmer 2016; Fouirnaies and Hall 2018). Fouirnaies (2018) finds that industries systematically give more to legislative agenda setters by whom they are regulated. Fouirnaies and Hall (2018) find that if a legislator gains procedural powers, they raise more money while Powell and Grimmer (2016) show that corporations and PACs use contributions to acquire immediate access by exploiting the committee exile procedure<sup>2</sup>. Similarly, Kalla and Broockman (2016) show with a randomized field experiment that political donors can access policy makers three to four times more often if they are known to be political donors by the policy makers. There is growing evidence of directly beneficial policy, though limited evidence that broad ideological positioning is affected by campaign contributions. Even though it has been shown that roll call voting is not immune

<sup>&</sup>lt;sup>2</sup>Legislative committee exile refers to the involuntary removal of legislators from their committee assignments following a wave election. This occurs when a party loses its majority status, leading to a decrease in the number of seats it holds on committees. Due to the uneven distribution of electoral losses across committees, an excess of legislators will return to committee assignments. Consequently, some legislators will be involuntarily removed from their committees, a situation referred to as "exile." by Powell and Grimmer (2016)

to campaign contributions (Canes-Wrone and Gibson 2019), many studies failed to show a significant relationship between campaign contributions and the ideology of representatives (Wawro 2001; Ansolabehere et al. 2003; Milyo 2015). While Wawro (2001) suggests that contributions from business and labor interests do not consistently influence the voting behavior of members of Congress on issues that are considered important to those interests, Ansolabehere et al. (2003) indicate that the impact of campaign contributions on votes is relatively limited and highlight that legislators' voting decisions are predominantly influenced by their own beliefs, the preferences of their constituents, and their party affiliations. Hence, distinct from specific favours, the question that how broad ideological positioning is affected by contributions remains unresolved.

The existing literature on political contributions sheds light on how candidates are able to secure more funding (Ansolabehere and Snyder Jr 2002; Hirano and Snyder 2009) as well as how the sources and composition of the money vary based on ideological considerations. Specifically, Ensley (2009) emphasizes the significance of candidate ideology in understanding fundraising patterns from individual citizens. Their findings suggest that candidates with more extreme ideologies tend to attract higher amounts of money from individual contributions. Similarly, Barber (2016 a, b) suggests that while individual donors tend to support ideologically extreme candidates, PACs seeking access to policy favors are more likely to support moderate candidates. However, there is a gap in the literature regarding how these motivations of PACs and individuals affect the behavior of politicians themselves. Therefore, this study aims to address this gap by examining the relationship between campaign contributions and ideology scores of members of the US House of Representatives.

This study is distinct from the previous studies by neither focusing on a specific industry nor a specific issue. It examines the relationship between campaign contributions and representatives' ideological positioning for the 107th to 116th Congresses. Thus, this study makes a significant contribution to the existing literature by providing empirical evidence on the impact of campaign contributions on the ideological stance of the US House of Representatives, using a novel data set. We classify contributors into three groups: 'Democrat', 'Republican', and 'split-ticket' and construct a new data set using the campaign contributions from corporations, PACs, and unions through individual and PAC contributions to the US House of Representatives from the 107th to 116th Congresses. We find that money raised from 'Republican' and 'split-ticket' sources through the previous cycle leads to more liberal ideology. Furthermore, after accounting for different levels of electoral competition, our analysis indicates that 'Democrat' contributions leads to representatives becoming more conservative. These results suggest that money in US politics has a centripetal impact, which may appear paradoxical initially.

In other words, money in US politics is estimated to have a reversing effect on polarization. Given that the House of Representatives is increasingly polarized (Heckman and Snyder Jr 1996; Theriault 2006; Poole and Rosenthal 2017), our research provides important insights into the potential impact of campaign contributions on the ideological makeup of representatives.

#### 2.3 Theory

The impact of money in politics on the ideology of elected representatives is a complex issue, with competing theories on the direction of its impact. We consider two alternative impacts and provide two hypotheses namely the ideological and stabilising hypotheses. The ideological hypothesis posits that money from liberal/conservative contributors influences the policy preferences of representatives on economic matters, pushing them towards more liberal/conservative positions. The stabilising hypothesis on the other hand suggests that regardless of its sources money in politics rewards centrism, incentivizing representatives to adopt more moderate policy positions on economic matters.

Under the ideological hypothesis the impact of money depends on the political leanings of the contributors (Maloney and Pickering 2018). If the ideological hypothesis is dominant, we would expect Representatives who receive more money from Democrat contributors will adopt more liberal policy positions, while Representatives who receive more money from Republican contributors will adopt more conservative policy positions. It is also plausible that specific types of contributors may benefit materially from ideological policies. For instance, if "Republican" money primarily originates from corporate sources (which is often the case), these donors may seek policies aligned with right-wing ideologies, such as lower taxes and reduced regulations. Similarly, Democrat contributors may disproportionately stem from Unions with ideological preferences towards greater redistribution and labour market protection. While the existing literature generally focuses on identifying "direct" favors, it is important to recognize that ideologically aligned policies can also yield inherent advantages and rewards.

In this context, broadly sympathetic policies that align with the ideological stance of contributors can generate their own set of payoffs. These policy outcomes may not necessarily involve explicit or direct favors but can still contribute to the overall alignment of interests and priorities between the contributors and the policies implemented. Consequently, the influence of ideological contributions extends beyond immediate and tangible benefits, encompassing the broader ideological framework that shapes policy directions. Understanding this dynamic sheds light on the multifaceted nature of the relationship between campaign contributions and policy outcomes. While direct favors

are often explored in the literature, it is essential to consider the broader ideological resonance between contributors and policymakers, which can drive the formulation and implementation of policies that align with the contributors' preferences. The direction of ideological hypothesis' impact depends on the political leanings of the contributors. If the ideological hypothesis is dominant, we would expect (H1):

**H1(a)** Representatives who receive more money from "Republican" contributors will adopt more conservative economic policy positions.

**H1(b)** Representatives who receive more money from "Democrat" contributors will adopt more liberal economic policy positions.

The second hypothesis is the stabilising hypothesis which posits that money in politics rewards centrism, pushing representatives towards more moderate policy positions. If the stabilising hypothesis is dominant, we would expect Representatives who receive more money from contributors will be incentivized to adopt more centrist policy positions, regardless of the source of the money.

Firms and other potential contributors may encounter substantial adjustment costs when policies undergo significant ideological shifts. As a result, they are more likely to fund and support political centrism, which offers a stable and predictable policy environment. Investment decisions heavily rely on certainty, and investors tend to be risk-averse. Centrism implies lower volatility of policy, and hence greater certainty concerning regulation and business environment in general. Therefore, when policy changes are minimal or gradual over time, it becomes easier for businesses to make informed and confident investment choices.

The rationale behind this behavior lies in the fact that sudden and drastic policy shifts can disrupt existing business strategies and introduce uncertainties. Such uncertainties pose challenges for firms in terms of adapting their operations, adjusting their long-term plans, and managing potential risks. Consequently, firms tend to prefer a more stable and predictable policy environment that allows for greater clarity and reduces the likelihood of costly adjustments. By rewarding centrism, firms are essentially expressing their preference for policies that strike a balance and avoid extreme ideological swings. They recognize that moderate policy positions contribute to a more conducive business environment, enabling them to make confident investment decisions and pursue long-term strategies with reduced uncertainty. Thus, if the stabilising hypothesis is dominant, we would expect (H2):

**H2** Representatives who receive more money from contributors will adopt more centrist policy positions, regardless of the source of money being "Democrat", "Republican" or "split-ticket".

Overall, the impact of money in politics on the ideology of elected representatives likely depends on a combination of contextual factors. While the ideological hypothesis suggests that money from liberal or conservative contributors can influence the policy preferences of representatives in favor of the contributor's ideology, the stabilising hypothesis suggests that money in politics may incentivize representatives to adopt more moderate policy positions. Hence findings of this study will provide empirical evidence on which hypothesis works better to explain the US politics by using the campaign contributions and ideology scores that are produced from roll call voting data of representatives.

In addition to the main hypotheses, our study also considers the effects of political competition and the tenure of representatives. Existing research by Burden (2004) and Ansolabehere et al. (2001) suggests that candidates in highly competitive races are more likely to adopt moderate positions. These candidates are compelled to appeal to a larger portion of the electorate, including swing voters, and may need to moderate their positions to capture a broader range of voters. Thus, we propose the following hypothesis (H3):

H3 Candidates in highly competitive races in the US are more likely to adopt moderate ideological positioning compared to candidates in less competitive races.

Furthermore, the impact of campaign contributions on the voting decisions of representatives in the US House of Representatives is argued to be affected by their level of experience (Stratmann 2002). Stratmann (2002) suggests that campaign contributions have a stronger influence on the voting behavior of junior members compared to more senior colleagues. The rationale here is career concerns. Junior representatives will be more focused on pleasing donors. Arguably the elasticity of junior representatives' ideology to donations may be higher compared with senior representatives. Building upon this idea, our final hypothesis aims to examine whether the time spent in Congress affects representatives' ideological scores and their responsiveness to campaign contributions. Thus we test the following hypothesis (H4):

**H4** The impact of campaign contributions on ideology is greater for junior members compared with senior colleagues.

### 2.4 Data and Methodology

To test the impact of campaign contributions on the ideological stance of the US House of Representatives, we use a variety of data and examine a span of ten US Congresses, ranging from the 107th to the 116th (2001-2021).

#### 2.4.1 Campaign contributions data

The first source of data is a comprehensive list of contributions to representatives that are gathered from the Center for Responsive Politics<sup>3</sup> for the US House of Representatives elections from 2000 to 2018. This data allow us to calculate the amount of money raised by each representative from corporations, PACs, and unions through individual and PAC contributions. Notably, the dataset includes contributions not only from corporations but also from individuals associated with those corporations. As corporations and other institutions are subject to limitations when it comes to making political contributions, the data from the Center for Responsive Politics is useful to gauge the ideological preferences of contributors. Examining the contributions from people associated with these institutions allows us to better understand their ideological preferences and how they may be attempting to influence representatives.

Our study specifically examines campaign contributions exceeding \$10,000, which is one of the minimum limits set by the Federal Election Commission. By narrowing our focus to these contributions, we aim to capture those that are intentionally made to surpass the limit, allowing us to differentiate between contributions driven solely by political preferences and those motivated by special interests. This approach helps us exclude smaller "consumption" or charitable contributions that are unlikely to be motivated by ideological quid pro quo. Our dataset comprises 20,666 observations corresponding to 610 representatives who have been elected at least three times and have received donations exceeding \$10,000 from at least one contributor.

To examine the impact of money on the ideology of representatives from different parties, we classify the ideological preferences of the contributors by using a simple method. For each election cycle if more than 2/3 of an individual contributor's total contribution goes to Republican candidates, then these contributions are recorded as "Republican" money. Similarly, if more than 2/3 of an individual contributor's total contribution goes to Democrat candidates, then these contributions are recorded as "Democrat" money. If the contributions to both separate parties are less than 2/3 of total donations, then the money is recorded as "split-ticket".

The choice of the 2/3 cut-off for classifying contributions is grounded in a straightforward rationale. This method allows us to distinctly categorize contributors based on their predominant political leanings. By setting the threshold at 2/3, we ensure that a contributor is classified under a particular party only if their contributions to that party are significantly higher – more than double – than what they give to the other party. This approach minimizes the ambiguity in determining a contributor's political

<sup>&</sup>lt;sup>3</sup> www.opensecrets.org

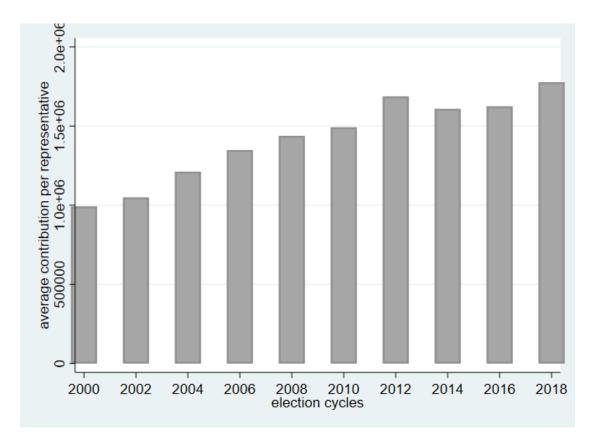


Figure 2.1: Receipts in Time

inclination and provides a clear, quantifiable metric to gauge the ideological direction of their financial support. It simplifies the classification process and lends precision to our analysis of how contributions correlate with the ideological positions of political representatives. Additionally, this method offers a balanced range for each variable – namely 'Democrat,' 'Republican,' and 'split-ticket' money – ensuring a consistent and equitable framework for comparison across different categories of political contributions.

Take Jo Bonner (Republican) from Alabama, district 1, in election cycle 2004 as an example. He received four contributions above \$10,000 from University of South Alabama (\$20,031), Alabama Power (\$18,250), Cunningham, Bounds et al (\$15,000), and Mitchell Brothers (\$11,000). 98.25% of University of South Alabama's total contributions, 72.85% of Alabama Power's total contributions, and 100% of Mitchell Brothers' total contributions went to Republican candidates in 2004 election cycle. Hence, the money coming from these contributors are aggregated and recorded under "Republican" money (\$49,281). On the other hand, only 58.54% of Cunningham, Bounds et al's total contributions went to Republican candidates and as this ratio is less than 66.66% this money recorded under "split-ticket" (\$15,000). The point of distinguishing between different type of donors is to test the hypotheses that are presented in the theory section. For example under H1(a) Republican money is hypothesized to move candidates

Table 2.1: Summary Statistics on Different Types of Donations

	01	3 /f	C. I. D.	3.4:	3.7
	Obs.	Mean	Std. Dev.	Min.	Max.
Republican Donations					
+ D 11:	1 555	F0004 F0	60500.0	0	700007
to Republicans	1,757	52964.59	69590.9	0	760627
to Democrats	1,699	4173.361	11481.2	0	180519
to Democrats	1,099	4173.301	11401.2	U	100019
Democrat Donations					
Democrat Donations					
to Republicans	1,757	2662.562	8849.311	0	145300
	,				
to Democrats	1,699	46070.4	76985.47	0	1244619
Split-ticket Donations					
to Republicans	1,757	38031	58860.78	0	520325
	1 000	22070.1	10000 00	0	24222
to Democrats	1,699	32058.1	46833.28	0	369223

Table 2.1 Notes: summarizes the contributions made various representatives  $\operatorname{type}$ during the election cycles spanning from 2000 2018 by each ofdonors.

to the right. Under H2, both Democrat and Republican money is hypothesized to move candidates to the centre.

Following the above example, the four contributions that are made to Jo Bonner from Alabama, district 1, in election cycle 2004, are consolidated into one observation for each variable: "Republican" money totaling \$49,281, "Democrat" money amounting to \$0, and "split-ticket" money equating to \$15,000<sup>4</sup>.

Figure 2.1 shows the average total amount of money received by representatives in the sample on average for each election cycle in our data set. Campaign contributions have almost doubled from 2000 election to 2018 election. Even after inflation, campaign contributions have been growing despite the financial crisis.

Table 2.1 provides information on the amount of money contributed to political parties by contributors that are identified as "Republican", "Democrat", and "split-ticket". For

<sup>&</sup>lt;sup>4</sup>This consolidation process is applied to the contributions received by each representative for each election cycle, resulting in a reduced number of observations from 20,666 to 3,456 for each variable, representing 610 representatives in total.

each panel, there are two variables: the amount of money contributed to Republican and Democrat representatives. Overall, these variables provide insight into the contribution patterns of different types of money and can be useful for understanding the dynamics of campaigns contributions. There are a total of 1,757 observations for money donated to Republicans and 1,699 observations for money donated to Democrats. By construction, the majority of "Republican" contributions align with their own ideology, with a mean of \$52,964.59 and a standard deviation of \$69,590.9, compared to a mean of \$4,173.36 and a standard deviation of \$11,481.2 for contributions to the Democrats from contributors normally aligned with the Republicans. Similarly, the majority of "Democrat" contributions align with their own ideology, with a mean of \$46,070.4 and a standard deviation of \$76,985.47, and a mean of \$2,662.56 and a standard deviation of \$8,849.31 for contributions to the opposing ideology. For "split-ticket" money, the amount contributed to Democrats is slightly lower than that contributed to Republicans, with a mean of \$32,058.1 and a standard deviation of \$46,833.28 for contributions to Democrats, compared to a mean of \$38,031 and a standard deviation of \$58,860.78 for contributions to Republicans. Hence, our classification of money as 'Republican', 'Democrat', and 'Splitticket' is justified as the contributions made by "Republican" and "Democrat" donors exhibit a strong party affiliation, with the majority of the contributions being made to their respective parties. In addition to that, contributions made by "split-ticket" donors show a lack of significant preference for either party, which also supports our classification of these contributions as "split-ticket money".

#### 2.4.2 Ideology data

The second source of data is Lewis et al. (2018). Using roll call voting data, Lewis et al. (2018) present two main estimates of a legislator's ideology: NOMINATE and Nokken-Poole. NOMINATE estimates assume that members occupy a static ideological position across the course of their career whereas the Nokken-Poole estimates allow that each congress is completely separate for the purposes of estimating a member's ideology and so the data are time-varying. Nokken-Poole estimates have two dimensions <sup>5</sup>. "Dimension 1" reports economic liberalism-conservatism (left-right) and varies between -1 to 0 for Democrats<sup>6</sup> and 0 to 1 for Republicans. "Nokken-Poole Dimension 1" ideology scores are used to measure each congress member's ideology for each congress for the sake of this

<sup>&</sup>lt;sup>5</sup>"Dimesion 2" reports cultural and social issues. There can be "socially conservative" Democrats as well as "socially liberal" Republicans. Hence, "Dimension 2" varies between -1 to 1 for both Republicans and Democrats.

<sup>&</sup>lt;sup>6</sup>The data for Gene Taylor, 2008, is the only exception of negative Democrat ideology score. Taylor was a member of the Blue Dog Coalition, and his voting record was one of the most conservative among Democrats in the House. According to a 2011 survey by the National Journal, Taylor was the most conservative Democrat in the House.

	Obs.	Mean	Std. Dev.	Min.	Max.
NP1 (Republican & Democrat)	3,456	.0431916	.4462126	784	1
NP1 (Democrat)	1,699	3879888	.1171735	784	.018
NP1 (Republican)	1,757	.4601383	.1569938	.052	1

Table 2.2: Summary Statistics on Ideology Scores

ideologyNotes: Table 2.2presents the summary statistics of the scores assigned 610 representatives US Representatives to serving in the House of across the 116th congresses. NP1stands for Nokken Poole Dimension ideology

study as our setting examines the impact of campaign contributions for different election cycles on representatives' ideology in economic matters for the following congress.

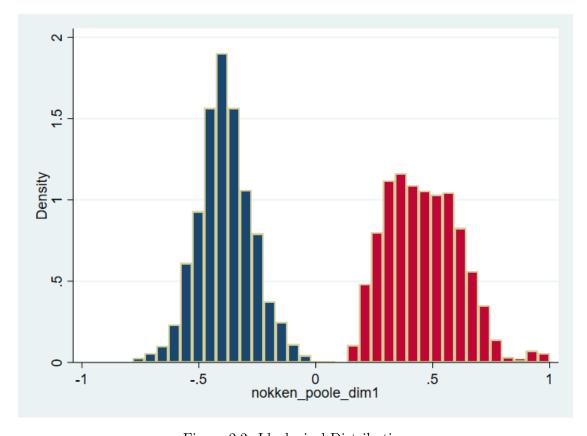
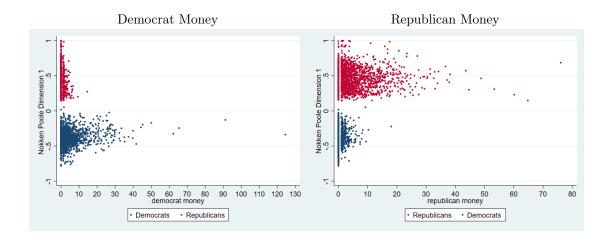


Figure 2.2: Ideological Distribution

Notes: Figure 2.2 presents the distribution of the ideology scores of Democrat and Republican representatives in the US House of Representatives across the 107th to 116th congresses.

Table 2.2 shows summary statistics for the Nokken-Poole Dimension 1 ideology scores. The data set contains 3456 observations, 1699 of which belongs to Democrats and 1757 to Republicans. The absolute mean and the standard deviation of Democrats are less



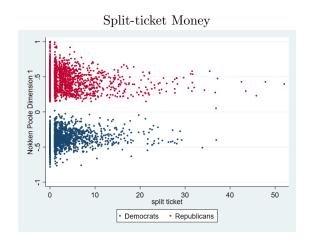


Figure 2.3: Dispersion of Democrat, Republican and Split-ticket Contributions Notes: Figure 2.3 presents the money raised through the election cycles from 2000 to 2018 by each representatives. Amounts of "democrat money", "republican money" and "split-ticket money" are in ten thousand US dollars.

than Republicans. In addition to that the absolute minimum of Democrats are also less than maximum value of Republicans.

Figure 2.2 shows the distribution of Nokken Poole Dimension 1 ideology scores of Democrat and Republican congress members in our data set. As in the figure while both Democrat and Republican representatives exhibit a normal distribution, Republican representatives are seen to have a bigger variance compared to Democrats. In addition to that, on average Democrat representatives are closer in absolute terms to the center (zero) while Republican representatives are on average more extreme compared to their Democrat counterparts. Together with Table 2.2, this implies that Democrat representatives are already more moderate than Republicans conforming with Theriault (2006).

Figure 2.3 shows the ideology scores of individual Democrat and Republican representatives together with total contributions received from "Democrat", "Republican" and "split-ticket" donors. As already discussed, Democrat representatives received greater contributions from "Democrat" donors while Republican representatives received more from "Republican" donors. As for "split-ticket" donors, overall, Republican representatives received more and higher contributions than Democrats, though "split-ticket" money distributed quite evenly.

#### 2.4.3 Competition data

Finally, in addition to these two data sources, the data set of Bonica (2019) is used to include the vote shares of each representatives when they won the election. This number is bounded from below by construction at 0.5 (at least in the the vast majority of cases where there are just two candidates), hence greater values correspond to lower political competition. The inclusion of competition data is based on the idea that candidates are more likely to adopt moderate positions in highly competitive races in the US (Burden 2004; Ansolabehere et al. 2001) as well as the median voter theorem, which posits that candidates will adopt positions that appeal to the median voter, leading to competitive race in which the median voter is pivotal. Hence, the inclusion of competition data is relevant to accurately predict representatives ideological positioning.

Table 2.3 shows summary statistics for the winning vote shares and the time spent in the Congress of representatives in the US House. The data set contains 3456 observations, 1699 of which belongs to Democrats and 1757 to Republicans. The mean and the standard deviation of the winning vote shares and the time spent in the Congress of Democrats are slightly larger than Republicans.

Table 2.3: Summary Statistics on Competition and Experience

	Obs.	Mean	Std. Dev.	Min.	Max.
Winning Vote Share (Republican & Democrat)	3,456	.6630725	.1194523	.3997648	1
Winning Vote Share (Democrat)	1,699	.6802099	.1237242	.3997648	1
Winning Vote Share (Republican)	1,757	.6465008	.1127543	.4009847	1
Time in Congress (Republican & Democrat)	3,456	5.21875	4.39802	0	29
Time in Congress (Democrat)	1,699	5.893467	4.695167	0	29
Time in Congress (Republican)	1,757	4.566306	3.984275	0	23

Notes: Table 2.3 presents the summary statistics of the winning vote share and the time spent in the Congress of representatives serving in the US House across the 107th to 116th Congresses.

#### 2.4.4 Empirical strategy

To test the impact of campaign contributions on the ideological stance of elected representatives in the US House, we use four specifications. Specification 1 includes time fixed effects only, and specification 2-4 in addition include spatial fixed effects with increasing degree of control. Specification 2 includes state fixed effects, specification 3 includes district-level fixed effects, and finally specification 4 includes representative-level fixed effects. This strategy follows that used in Ansolabehere et al. (2003). The baseline regression of our analysis is as follows:

$$Y_{it} = \beta_1 (Republican \ money)_{i(t-1)} + \beta_2 (Democrat \ money)_{i(t-1)}$$
$$+ \beta_3 (split \ ticket)_{i(t-1)} + \gamma_j + \delta_t + \epsilon_{it} \quad (2.1)$$

where i indexes representatives; t indexes time average through a congress;  $Y_{it}$  is the Nokken Poole ideology score of representative i at time t;  $\delta_t$  are time fixed effects. Republican money, Democrat money, and split ticket are the amount of money (in million dollars) that each representative received from "Republican", "Democrat", "split-ticket" donors that are explained at the beginning of this section;  $\gamma_j$  are zero for specification 1, state fixed effects for specification 2, district fixed effects for specification 3 and representative fixed effects for specification 4;  $\epsilon_{it}$  is the error term while  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  are the key parameters. This specification builds on Ansolabehere et al. (2003) who used corporate and labor campaign contributions as explanatory variables in their specification. In addition to their approach we classified contributions in three groups and added "split-ticket" donors into our specification for non-ideological contributions.

Under hypothesis H1(a) we expect  $\beta_1$  to be positive and  $\beta_2$  to be negative. On the other hand, under H2 we expect  $\beta_1$ - $\beta_3$  to be negative for Republicans and positive for Democrats.

In accordance with the findings of Burden (2004); Ansolabehere et al. (2001), we extend our model by including the degree of political competition as a control:

$$Y_{it} = \beta_1 (Republican \ money)_{i(t-1)} + \beta_2 (Democrat \ money)_{i(t-1)}$$
$$+ \beta_3 (split \ ticket)_{i(t-1)} + \beta_4 (winning \ vote \ share)_{i(t-1)} + \gamma_j + \delta_t + \epsilon_{it} \quad (2.2)$$

where winning vote share are the vote shares that representatives get to win the election. This equation will be applied to both Republican and Democrat subgroups to examine how campaign contributions from distinct ideological sources influence representatives' political stances after the level of competition is controlled for. Furthermore, to test whether candidates in highly competitive races in the US are more likely to adopt moderate ideological positioning Equation (2.1) will be employed by segmenting the sample depending on the degree of electoral competition. This approach is grounded in the hypothesis that candidates in highly competitive races are more inclined to adopt moderate positions. Thus, by dividing the sample based on competition levels, we can explore the differential impacts of campaign contributions on representatives' ideologies in varied electoral contexts.

Equations (2.1) and (2.2) are also applied to different subsets of the data to address the issue of heterogeneity that can arise from variations in electoral competition, tenure in Congress, and party affiliation. Under H3, we argue that candidates in highly competitive races are more likely to adopt moderate positions, and under H4, we argue that the impact of campaign contributions is greater on the ideology of junior members of Congress compared to their senior colleagues. Hence, the application of these equations to various subsets of the data allows for a more nuanced analysis of the relationships under investigation. By accounting for these factors, we can better understand the potential impact of electoral competition, tenure, and party membership on the variables of interest. To capture the effects of electoral competition and tenure, various subsets are constructed, high/low competition and veteran/novice representatives. Additionally, separate analyses are conducted for Republican and Democrat representatives to examine whether campaign contributions have differential effects on representatives from different parties.

#### 2.5 Results

Table 2.4 presents the estimation results for the basic specification. Results are significant in all 4 models. For models (1)-(3) "Republican money" is statistically associated with more conservative representatives, consistent with the ideological hypothesis. Similarly 'Democrat money' is correlated with liberal positioning. Interestingly there is a statistical correlation between split ticket money and lower (more liberal) ideology. From column (1) to (3) the absolute magnitude of the coefficient estimate of any type of money on ideology decreases as new restrictions are added in to the equations (state fixed effects, district fixed effects).

According to Table 2.4 column (1), an additional \$100,000 from 'Republican' donors raised through the electoral cycle is on average associated with an ideological shift to the right of 0.319 points, while an additional \$100,000 from 'Democrat' and 'Split-ticket' donors raised through the electoral cycle is on average associated with an ideological shift to the left of 0.195 and 0.0636 points respectively. The conservative impact of "Republican money" decrease to 0.278 and 0.111 in column (2) and (3) respectively when state fixed effects and district fixed effects are introduced in the model. The liberal impact of "Democrat money" and "split-ticket money" decrease to 0.151, 0.0842 and 0.0353, 0.351 in column (2) and (3) respectively when state fixed effects and district fixed effects are introduced. The magnitude of estimated impact of "Republican", "Democrat" and "split-ticket" money are much higher for column (1) to (3). However, findings of these columns do not account for unobserved representative characteristics. Using representative fixed effects (as in column (4)) provides the most compelling estimates<sup>7</sup>, because it controls for representatives' own (average) ideology.

Results in columns (1)-(3) do not permit causal inference relating to the hypotheses above due to failure to control for representative-level fixed effects. When these are controlled for, the statistical correlation reverses. The reason behind the coefficient estimate sign flip is because in column (4), the model is controlling for otherwise unobserved representative characteristics. There exists a correlation between Republican ideology and "Republican money," as well as a correlation between Democrat ideology and "Democrat money", therefore the results in column (4) are the key findings of this study, representing the within-representative estimator. When examining individual representatives, it becomes evident that money plays a moderating role, which aligns with the stabilisation hypothesis.

Column (4) of Table 2.4 is the main result of this chapter. After introducing representative fixed effects to the equation, the estimated impact of "Republican money" and "Democrat money" changes sign and the estimated impact of "Democrat money" becomes insignificant. An additional \$100,000 "Republican money" is estimated to make representatives 0.0104 points more liberal on the ideological map supporting the stabilisation hypothesis. Although the impact of "Democrat money" on ideology is not statistically significant, the positive coefficient estimate still reflects the centripetal effect too.

On average, Republican representatives have an ideology score of 0.46 and Democrat representatives have an ideology score of -0.39 on the Nokken-Poole dimension 1 scale as shown in Table 2.2. This means that an additional \$100,000 in campaign contributions from Republican sources are estimated to make representatives more than 2% more

<sup>&</sup>lt;sup>7</sup>Because of this reason for the following tables only the results in column (4) are going to be discussed.

	(1)	(2)	(3)	(4)
	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim1
Republican money	3.189***	2.779***	1.108***	-0.104***
	(24.08)	(21.51)	(13.19)	(-3.69)
Democrat money	-1.946***	-1.509***	-0.842***	0.0248
	(-16.50)	(-13.35)	(-12.06)	(1.01)
split-ticket money	-0.636***	-0.353**	-0.351***	-0.102***
	(-4.59)	(-2.67)	(-4.13)	(-3.76)
Time FE	Yes	Yes	Yes	Yes
State FE		Yes		
District FE			Yes	
Representative FE				Yes
N	3456	3456	3456	3456
R-sq	0.247	0.364	0.836	0.988

Table 2.4: Baseline Estimation

Notes: Each column reports estimates of Equation (2.1), in which the dependent variables are the ideology scores of all representatives including both Republicans and Democrats. The amounts of "Republican money", "Democrat money" and "split-ticket money" are in million US dollars. t statistics in parentheses, and \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

liberal on the ideology scale<sup>8</sup>. As discussed above "Republican money" predominantly goes to Republicans. Hence, it can be argued that it pulls Republicans to the centre. Although the impact of "Democrat money" on ideology is insignificant, the positive coefficient estimate encapsulates the centripetal effect too.

Furthermore, an additional \$100,000 of "split-ticket money" is estimated to make representatives 0.0102 points more liberal. However, for the estimated impact of split-ticket contributions to align with the stabilisation hypothesis, either the overall ideology of the US House of Representatives should already be closer to conservatism (which is the case), or the impact of split-ticket contributions should be driven by Republican representatives. Table 2.5 presents the estimation results for the basic specification considering for the party affiliation, hence examines whether the impact of split-ticket contributions align with the stabilisation hypothesis.

According to Table 2.5 Panel (a) Column (4), an additional \$100,000 of "split-ticket money" is estimated to make Republican representatives 0.0138 points more liberal<sup>9</sup>, which further supports the stabilisation hypothesis. "split-ticket money" has a similar impact on Republican representatives' ideology as "Republican money". The same centripetal effect is there and it is even greater for the split-ticket contributions. The negative impact of "Republican money" found for the whole sample is also empirically driven by the Republican representatives. Hence, our argument on "Republican money"

<sup>&</sup>lt;sup>8</sup>It is important to underline that as provided in Table 2.1 the mean of contributions to Republicans and to Democrats from "Republican money" are \$52,965 and \$4,173 respectively.

 $<sup>^9</sup>$ The mean of contributions to Republicans and to Democrats from "split-ticket money" are \$38,301 and \$32,058 respectively as in Table 2.1

(2)(4) Nokken-poole Dim1 Nokken-poole Dim1 Nokken-poole Dim1 Nokken-poole Dim1 (a) Republicans Republican money 0.0405 0.0896 0.0200 -0.105\*\* (0.68)(1.76)(0.50)(-3.20)-2.236\*\*\* -1.090\*\* -0.1050.156Democrat money (0.76)(-5.23)(-3.06)(-0.40)-0.578\*\*\* split-ticket money -0.447\*\*\* -0.347\*\*\* -0.138\*\*\* (-8.11)(-7.41)(-7.18)(-3.55)N 17571757 1757 1757 R-sq 0.1020.4230.7830.881(b) Democrats 1.073\*\*\* 0.640\*\*0.0629 Republican money 0.0951 (4.22)(2.64)(0.57)(0.48)0.272\*\*\* 0.300\*\*\* 0.137\*\*\* 0.0186Democrat money (0.84)(7.25)(8.48)(5.30)0.251\*\*\* 0.259\*\*\* 0.0316 -0.0617 split-ticket money

Table 2.5: Baseline Estimation with Party Affiliation

Notes: Each column reports estimates of Equation (2.1), in which the dependent variables are the ideology scores of representatives. The data set is divided into two subsets based on the party affiliation. While Panel (a) reports estimates for Republican representatives, Panel (b) reports estimates for Democrat representatives. The amounts of "Republican money", "Democrat money" and "split-ticket money" are in million US dollars. t statistics in parentheses, and \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

(4.15)

1699

0.259

Yes

Yes

(0.68)

1699

0.763

Yes

Yes

(-1.57)

1699

0.859

Yes

Yes

(3.88)

1699

0.071

Yes

R-sq

Time FE

State FE

District FE

Representative FE

also holds as Table 2.5 further confirms that "Republican money" pulls Republicans to the centre.

There are no significant impact in Table 2.5 Panel (b). However, when considering only Democrat representatives, the negative impact of "Republican money" on ideology changes to a positive impact. The positive coefficient estimate of "Republican money" indicates that the estimated effect of "Republican money" on the ideology of Democrats is consistent with the ideological hypothesis. Nevertheless, the positive coefficient estimate of "Democrat money" is still consistent with the stabilisation hypothesis. This suggests that while "Republican money" that goes to Democrats are in line with ideological hypothesis, "Democrat money" that goes to Democrats are in line with the stabilisation hypothesis. However, it is important to note that findings of Table 2.6 are not statistically significant.

(1)(2)(3)(4) Nokken-poole Dim1 Nokken-poole Dim1 Nokken-poole Dim1 Nokken-poole Dim1 -0.305\*\* -0.334\*\* -0.0817\* -0.0216 winning vote share (-13.54)(-14.79)(-4.15)(-1.32)1.206\*\*\* 0.604\*\*Republican money 0.108 0.0633 (0.65)(0.49)(4.99)(2.65)0.142\*\*\*  $0.117^{***}$ 0.160\*\*\*Democrat money 0.0149(3.84)(4.63)(4.46)(0.67)0.201\*\* 0.215\*\*\* 0.0293 -0.0624split-ticket money (3.67)(0.63)(-1.59)(3.27)Time FE Yes Yes Yes Yes State FE Yes District FE Yes Representative FE Yes 1699 N 1699 1699 1699  $\operatorname{R-sq}$ 0.162 0.346 0.766 0.859

Table 2.6: Democrats

which Notes: estimates of Equation (2.2), Each column reports  $_{\rm in}$ the dependent ables the ideology scores ofDemocrat representatives. The amounts of "Repubare money" "Democrat money" and "split-ticket money" are inmillion US dollars. statistics in parentheses, and 0.05,0.01,0.001.pp

Unlike Ansolabehere et al. (2003), the regression analysis find that changes in campaign contributions to an individual representative translate into changes in that representative's roll call voting behavior and this estimated change is generally centripetal. Despite the fact that the House of Representatives is often characterized as becoming more polarized in time (Heckman and Snyder Jr 1996; Theriault 2006; Poole and Rosenthal 2017), money is estimated to have a reverse impact in that sense by pulling the representatives to the centre and making them more moderate. Hence our findings suggest that stabilising theory dominates the ideological theory. In contrast to Schnakenberg and Turner (2021) who suggest that the influence of money in politics can contribute to party polarization, as contributions from interest groups can create incentives for politicians to adopt more extreme positions, our findings show that contributions work in the opposite direction. This result is also in line with the findings of Yonk et al. (2014) as they suggest more moderate voting records have more diverse PAC donations and those representatives are able to raise higher campaign donations.

Table 2.6 and Table 2.7 report the estimated impact of "Republican money", "Democrat money" and "split-ticket money" together with the winning vote share on the ideology of Democrat and Republican representatives respectively. Candidates in highly competitive races in the US are argued to adopt moderate positions (Burden 2004; Ansolabehere et al. 2001), in order to examine this Table 2.6 and 2.7 also control for the electoral competition.

(1)(2) (3)(4) Nokken-poole Dim1 Nokken-poole Dim1 Nokken-poole Dim1 Nokken-poole Dim1 0.189\*\* 0.0210 0.0184 winning vote share 0.0307 (5.79)(0.69)(0.75)(1.59)-0.101\*\* Republican money 0.0941 0.0953 0.0231 (0.58)(-3.08)(1.58)(1.85)-2.089\*\*\* -1.087\*\* Democrat money -0.1030.163(-4.92)(-3.05)(-0.39)(0.80)-0.586\*\*\* -0.449\*\*\* -0.348\*\*\* -0.134\*\*\* split-ticket money (-8.30)(-7.43)(-7.19)(-3.44)Time FE Yes Yes Yes Yes State FE Yes District FE Yes Representative FE Yes 1757 1757 1757 1757 0.783R-sq 0.119 0.423 0.881

Table 2.7: Republicans

which Notes: estimates of Equation (2.2), Each column reports inthe dependent ables  $_{
m the}$ ideology scores of Republican representatives. The amounts of "Repubare "Democrat money" money" and "split-ticket money" inmillion US dollars. are statistics in parentheses, and 0.05,0.01,0.001.pp

Although the estimation results are not statistically significant in column (4) in Table 2.6, the estimation results are still interesting. The winning vote share has a negative coefficient estimate, this is in line with the arguments of Burden (2004); Ansolabehere et al. (2001). The negative coefficient estimate suggests that higher competition is associated with centrism for Democrat representatives. The results on "Republican money", "Democrat money", and "split-ticket money" are in line with the findings presented in Table 2.5.

Table 2.7 presents estimation results of how Republican representatives' ideology changes with response to different types of contributions. The sign of coefficient estimate of the winning vote share is reverse of Democrat representatives which is also in line with the arguments of Burden (2004); Ansolabehere et al. (2001). As in the previous table, higher competition is associated with centrism for Republican representatives too. However, it is important to note that the estimated impact of the winning vote share is not statistically significant. The magnitude of the negative impact of "Republican money" and "split-ticket money" slightly decreased from -0.105 to -0.101 and -0.138 to -0.134 respectively for the Republican representatives after the inclusion of the winning vote share. Findings support our previous argument that "split-ticket money" also has a centripetal effect on ideology of representatives.

In Table 2.8 the data set is divided into two subsets based on the median winning vote share. Table 2.8(a) presents the results of high competition subset. Results relating to the estimated impacts of "Republican money" and "split-ticket money" are slightly lower

Table 2.8: High & Low Competition

	(1)	(2)	(3)	(4)
	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim1
		(a) High Competition		
Republican money	2.600***	2.341***	1.220***	-0.0905*
-	(18.07)	(16.42)	(10.32)	(-2.42)
Democrat money	-1.743***	-1.577***	-1.081***	$0.0769^*$
v	(-14.66)	(-13.74)	(-12.12)	(2.15)
split-ticket money	-0.691***	-0.606***	-0.322*	-0.0828*
1	(-4.34)	(-3.94)	(-2.47)	(-2.09)
R-sq	0.315	0.431	0.808	0.988
Dblisser	2.5.40***	(b) Low Competition	0.697***	0.120**
Republican money	$3.540^{***}$ $(14.10)$	2.682*** (11.11)	$0.627^{***}$ $(4.72)$	-0.139** (-2.76)
Democrat money	-3.399*** (-12.49)	-2.054*** (-7.91)	-0.200 (-1.44)	0.00694 (0.14)
split-ticket money	-0.561* (-2.41)	-0.127 (-0.59)	-0.292* (-2.51)	-0.139** (-3.13)
R-sq	0.254	0.409	0.908	0.991
Time FE State FE	Yes	Yes Yes	Yes	Yes
District FE		105	Yes	
Representative FE				Yes
N	1728	1728	1728	1728

Notes: Each column reports estimates of Equation (2.1), in which the dependent variables are the ideology scores of all representatives including both Republicans and Democrats. The amounts of "Republican money", "Democrat money" and "split-ticket money" are in million US dollars. The data set is divided into two subsets based on the median winning vote share, which is 64.6%. t statistics in parentheses, and \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

than the results at Table 2.4, however the estimated impact of "Democrat money" is now statistically significant and an additional \$100,000 from Democrat sources raised through the electoral cycle is on average associated with an ideological shift to the right of 0.0077 points. In addition to Table 2.4, the estimated impact of "Democrat money" on ideology is statistically significant and its impact is centripetal when political competition is higher. The estimated results in Table 2.8(a) provide support for the validation of the stabilisation hypothesis for all variables in the presence of high competition.

Table 2.8(b) on the other hand, reports estimation results for the low competition subset. The magnitude of both "Republican money" and "split-ticket money" increases, while "Democrat money" become statistically not significant as in Table 2.4. Hence the impact of "Democrat money" is estimated to be statistically significant for only close races where the impact of "Republican money" and "split-ticket money" are significant for both subsets. Their estimated impact is larger for the low-competition subset suggesting that a representative who got a "decisive victory" is affected more by "Republican

Ves

	(1)	(2)	(3)	(4)
	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim
		(a) Senior representatives	5	
Republican money	3.210***	2.549***	0.509***	-0.181***
-	(13.63)	(10.96)	(4.46)	(-4.09)
Democrat money	-3.613***	-2.789***	-0.779***	-0.00262
· ·	(-13.55)	(-10.81)	(-6.14)	(-0.05)
split-ticket money	-0.0713	0.252	0.123	-0.0423
-	(-0.39)	(1.41)	(1.34)	(-1.16)
N	1608	1608	1608	1608
R-sq	0.244	0.367	0.925	0.990
		(b) Junior representatives	S	
Republican money	2.729***	2.498***	0.954***	-0.0452
·	(16.97)	(16.16)	(9.23)	(-1.20)
Democrat money	-1.758***	-1.313***	-0.719***	0.0248
v	(-13.47)	(-10.57)	(-9.26)	(0.86)
split-ticket money	-0.801***	-0.605**	-0.253	-0.139**
-	(-3.62)	(-2.88)	(-1.81)	(-3.03)
N	1848	1848	1848	1848
R-sq	0.273	0.418	0.874	0.989
Time FE	Yes	Yes	Yes	Yes
State FE		Yes		
District FE			Yes	

Table 2.9: Senior & Junior Representatives

Notes: Each column reports estimates of Equation (2.1), in which the dependent variables are the ideology scores of all representatives (both Republicans and Democrats). The amounts of "republican money", "democrat money" and "split-ticket money" are in million US dollars. The data set is divided into two subsets based on the tenure of representatives. The median of the tenure of whole sample is 4 and the mean is 5.22. Panel (a) considers for representatives that are elected at least five times while Panel (b) considers for representatives that are elected for four or less times. t statistics in parentheses, and \* p < 0.05, \*\*\* p < 0.01, \*\*\*\* p < 0.001

Representative FE

money" and "split-ticket money" compared to a representative who won a closer race. The estimated results in Table 2.8(b) provide support for the stronger validation of the stabilisation hypothesis for "Republican money" and "split-ticket money" in the presence of low competition.

To address the potential variation between senior and junior representatives Table 2.9 divides the data set into two subsets based on the times representatives have been elected to Congress. Junior representatives are argued to be more likely to change their vote for campaign contributions as they have not yet established a firm policy position compared to senior representatives (Stratmann 2002). While Table 2.9(a) reports the results of experienced representatives who have been elected at least 5 times -the mean of the whole sample is 5.22, Table 2.9(b) reports the results of less experienced representatives who have been elected at most 4 times. In Table 2.9(a) Column (4), the significance of "split-ticket money" disappears, and the estimated coefficient of "Republican money"

is nearly twice as high as in the preceding tables. Unlike Table 2.9(a), in Table 2.9(b) the estimated impact of "split-ticket money" on junior representatives has a higher magnitude compared to previous tables, while this time "Republican money" loses its significance. Thus, results in Table 2.9 suggest that the estimated liberal impact of "Republican money" is mainly driven by senior representatives, while the estimated liberal impact of "split-ticket money" is mainly driven by junior representatives. As argued by Stratmann (2002) the impact of campaign contributions on voting decisions are different for junior members of the House compared to their more senior colleagues. However, the relationship is more complex than suggested by the previous analysis. Stratmann (2002) suggests that the impact of campaign contributions on voting decisions are argued to be larger for junior members of the House than for their more senior colleagues. However, in our case, the estimated impact of "split-ticket money" is significant and larger for junior members, while the estimated impact of "Republican money" is significant and larger for senior members.

Our findings suggest that changes in campaign contributions to an individual representative translate into changes in that representative's roll call voting behavior, thus ideology. Our findings suggest that the stabilising hypothesis dominates the ideological hypothesis. As a result, money in politics rewards centrism, incentivizing representatives to adopt more moderate policy positions on economic matters. Campaign contributions work in a more complex way than it is thought. "Republican money", "Democrat money" and "split-ticket money" make representatives more moderate. Considering the fact that house of representatives are becoming more polarized over time (Heckman and Snyder Jr 1996; Theriault 2006; Poole and Rosenthal 2017), campaign contributions work against polarization of the house of representatives which can be considered as a positive externality of contributions. This can be rationalised as contributors seek for a stable and secure economic environment for their investments, where they can expect a reasonable return on their investment without worrying about sudden and unpredictable policy changes. In addition to that experience of the representatives and the competition during the election campaign potentially have an impact on the mechanism of how campaign contributions affect the representatives' voting behaviour.

The findings of this chapter, centered on the relationship between campaign contributions and the ideological stances of U.S. House representatives, are subject to several limitations and potential issues that are important to acknowledge. Firstly, the classification of contributions as 'Republican', 'Democrat', or 'split-ticket' based on a 2/3 threshold, despite its methodological simplicity, could potentially oversimplify the intricate nature of donor behavior. To address this concern, an alternative cut-off was also employed to examine its effect on the classification and subsequent findings. Secondly, the study's context within the United States political system raises questions about

the generalizability of the findings. Political dynamics, including campaign finance and party politics, vary significantly across countries, possibly limiting the applicability of conclusions drawn in other settings. Thirdly, the temporal dynamics within the political spectrum are a crucial consideration. The study's time-frame may not capture the evolving nature of political ideologies or shifts in party policies, which could influence the interpretation of campaign contributions over different election cycles. However it is also important to underline the focus of this study is on the ideology score of representatives about economic matters. Therefore we do not expect a big variation for the ideology scores over time. Lastly, the final point of concern is the measurement of representatives' ideologies. The methodology employed analyzing the voting records, might not comprehensively reflect the complex spectrum of an individual's political ideology, thus potentially affecting the accuracy of the ideological classification.

#### 2.6 Conclusion

This research highlights the important role that money plays in shaping the political landscape. By classifying campaign contributions depending on overall contributions behaviour of contributors, it has generally shown that money has a centripetal effect on elected Representative's ideological stances, meaning that it tends to flow towards the political centre. Hence, it shows that campaign contributions can play a significant role in shaping the political landscape in the US, as they can influence the ideological positioning of elected representatives. The research also found that money can have a depolarizing effect on the US House of Representatives. This is arguably because money can reduce the incentive for elected representatives to take extreme positions or to engage in partisan politics.

The findings suggests that an additional \$100,000 of "Republican money" and "splitticket money" are estimated to make representatives 0.0105 and 0.0138 points more liberal on the ideological map respectively. These results only hold for Republican representatives. Results are especially strong when political competition is absent. On the other hand, results on "Democrat money" are estimated to be statistically significant for only high competition subset where the magnitude of "Republican money" and "splitticket money" is lower. In addition to that while the estimated impact of "splitticket money" is stronger for junior representatives, the estimated impact of "Republican money" is stronger for senior representatives.

This research is not the final word on the impact of campaign contributions on ideology of the US House of Representatives, and that further research is needed to fully understand the complex interplay between money and politics in the US. However, it does provide important insights into the ways in which money can influence the political process and shape the policy outcome.

# Chapter 3

# Campaign Contributions and Financial Returns in the US

#### 3.1 Introduction

This chapter examines the impact of campaign contributions on the financial returns of corporations. The analysis distinguishes between 'ideological' contributions, where donors solely give to just one party, and situations where donors give to both parties - which is more likely to be materially motivated.

The role of money in politics<sup>1</sup> and its potential impact on corporate returns has been a topic of significant interest in US politics. Campaign contributions made by corporations to elected representatives have raised questions about the potential implications on corporate performance and the broader political dynamics at play. The motives behind campaign contributions are still not fully understood, with different hypotheses such as the "investment" hypothesis and the "consumption" hypothesis being proposed. If the consumption hypothesis is considered to be accurate, campaign contributions can be seen as a way to engage in the political process. In this hypothesis, such contributions do not necessarily indicate improper or undemocratic influence. On the other hand, when contribution decisions are primarily motivated by an investment mindset, it raises concerns about the potential for an undemocratic exchange of policy for financial support. Hence, understanding the relationship between campaign contributions and corporate returns is crucial in examining the investment hypothesis that posits campaign contributions as a potential tool for acquiring political favors.

<sup>&</sup>lt;sup>1</sup>While Ansolabehere et al. (2003) convey that the impact of contributions on voting outcomes are relatively little in their paper that survey 36 studies, Stratmann (2005) provides a survey of the literature that shows the positive effect of contributions on the probability of a legislator winning an election.

To explore whether or not corporations benefit financially from campaign contributions, this research uses data from two primary sources. The first source of data is the Center for Responsive Politics<sup>2</sup>, which provides comprehensive information on campaign contributions made by corporations to elected representatives from 2000 to 2018. This data includes details on the amount, timing, and recipients of campaign contributions. The second source of data is the Center for Research in Security Prices (CRSP), US Stock, and US Index Databases, which offers detailed data on 254 corporations<sup>3</sup>. It provides specific information on different type of returns as well as information on industry, sector, sub-industry codes of these corporations for the period from 2000 to 2020. These two data sets enable the analysis of the financial performance of contributing corporations and allows for insights into the potential impacts of campaign contributions on corporate financial returns.

As the role of money in politics continues to be a controversial issue, understanding the potential financial impacts of campaign contributions on corporate performance is important. The findings of this research may shed light on the complex dynamics at play, including the strategic considerations of corporations when making political contributions and the potential benefits that may occur from such contributions. This study aims to contribute to the existing body of research on the relationship between campaign contributions and contributing corporations' returns.

The findings suggest that campaign contributions have a significant negative impact on corporate returns if corporations contribute solely to the Republican party, suggesting that political donations can result in financial loss for corporations. An extra \$100,000 contributions is associated with 1.323 unit decrease (37.5% on average) on cumulative returns of the corporations in the following two years while the representatives are in congress. When examining corporations that contribute solely to Democrats, the sign of the coefficient estimate for contributions is also negative but statistically insignificant. Although the sign of the coefficient estimate when considering cases where corporation contributed to representatives from both parties is positive, findings are not statistically significant. This suggests that corporations, which may be acting in an ideological manner rather than driven by financial motivations, tend to experience negative effects on their returns as a result of their contributions. An alternative inference is that ideological contributions are made for ideological reasons, and not reasons of self-interest (or profit).

The chapter is organised as follows. Section 2 provides a review of the relevant literature. Section 3 introduces the variables and data sources, and also discusses the identification

<sup>&</sup>lt;sup>2</sup> www.opensecrets.org

<sup>&</sup>lt;sup>3</sup>Please see the appendix for the list of corporations.

strategy and methodology. Section 4 presents and evaluates the results generated from the analysis. Section 5 draws some conclusions derived from the analyses and highlights the importance of the study.

#### 3.2 The Literature

The literature concerning campaign contributions and returns is vast and multi-disciplinary. There are many theoretical studies trying to understand the mechanism behind campaign contributions and policy outcomes (Campante 2011; Fox and Rothenberg 2011; Chamon and Kaplan 2013; Bouton et al. 2018; Battaglini and Patacchini 2018; Schnakenberg and Turner 2021). Although Aggarwal et al. (2012); Fowler et al. (2020) find no evidence that corporate campaign contributions buy significant political favors, different studies show that corporations from certain industries are potentially rewarded for their contributions by subsidies, protectionist measures, and/or regulations that benefit the industry (Grier et al. 2022; Mian et al. 2010; de Figueiredo Jr and Edwards 2007; Lopez 2001). These studies investigate whether policy outcomes of specific industries are affected by contributions.

Grier et al. (2022) and de Figueiredo Jr and Edwards (2007) find similar results in which they examine the relationship between campaign contributions from the sugar industry and roll-call voting in the US House of Representatives and the influence of campaign contributions on regulatory outcomes in the telecommunications industry respectively. Grier et al. (2022) find that members of Congress who receive campaign contributions from the sugar industry are more likely to vote in favor of bills that benefit the industry, such as subsidies and protectionist measures and de Figueiredo Jr and Edwards (2007) find that firms that make campaign contributions to members of Congress are more likely to receive favorable regulatory outcomes, such as approvals for mergers and acquisitions, from regulatory agencies. Moreover, Lopez (2001) finds that members of Congress who receive campaign contributions from the agricultural industry are more likely to vote in favor of subsidies for agriculture, particularly for crops grown in their own districts, and Mian et al. (2010)'s findings indicate a significant increase in the amount of money spent on campaign contributions and lobbying efforts by mortgage lenders during the period between 2002-2007. Furthermore, they show that mortgage lenders increasingly focused their campaign contributions on representatives from congressional districts with high subprime shares.

In addition to these studies, it has been shown that campaign contributors seek policy influence. Fournaies (2018) finds that industries systematically gives more to legislative agenda setters by whom they are regulated. Fournaies and Hall (2018) find that if a

legislator gains procedural powers, they raise more money while Powell and Grimmer (2016) show that corporations and PACs use contributions to acquire immediate access by exploiting the exile procedure. On the other hand, Kalla and Broockman (2016) show with a randomized field experiment that political donors can access policy makers three to four times more often if they are known to be political donors by the policy makers. As such, it seems that contributions are made with the intention of gaining favourable treatment in policy outcomes. However, the question of whether contributions are linked to an increase in the value of corporate contributors remains unanswered.

In their study that focuses on contributions between 1991-2004 using data from the Center for Responsive Politics and the Center for Research in Security Prices, (CRSP), Aggarwal et al. (2012) find that corporate donations are associated with lower returns. According to Aggarwal et al. (2012) an extra million dollars is associated with 0.07% decrease in excess returns of corporations. However, their study examines the impact of soft money and soft money cannot be used to finance federal election campaigns directly. In contrast to Aggarwal et al. (2012), Cooper et al. (2010) find that campaign contributions and future returns of firms are positively correlated. They construct measures using firm-level contributions to US political campaigns from 1979 to 2004. They find that a one-standard deviation increase in the number of supported candidates is associated with about a 2.61% per-year higher abnormal return, using the Federal Election Commission, FEC data and CRSP data. Supporting Cooper et al. (2010)'s findings Shon (2010) shows that there is a positive relation between pre-election campaign contributions to Bush and stock return of industries by focusing on the 37 days recount period in 2000 presidential election. Moreover, Huber and Kirchler (2013) reveal that companies that allocated a larger percentage of their contributions to the winning candidate and made a higher total contribution during US presidential elections from 1992 to 2004 experienced abnormal positive returns following the elections. Their findings indicate that companies that solely contributed to the winning candidate, on average, achieved a 5.5 percentage points higher performance in the first year following an election compared to companies that distributed their contributions evenly between both candidates. By constructing hypothetical portfolios consisting of the top 30 corporate contributors, categorized based on the proportion of contributions given to the eventual winner and the total contribution (relative to market capitalization), they find substantial abnormal returns (up to 25%) in the two-year period following the election. Although these studies provide insights on the relationship between campaign contributions and corporate returns, there is still more to explore. It is necessary to consider up-to-date data to capture the dynamic nature of campaign financing and its impact on corporate returns.

This study builds upon the findings of Shon (2010); Cooper et al. (2010); Aggarwal et al. (2012); Huber and Kirchler (2013) in several ways, expanding and refining the existing

research. One key distinction is the unique data set used in this study, which goes beyond contributions solely from corporations and includes contributions from individuals associated with those corporations. Also unlike Cooper et al. (2010), this study does not rely solely on contributions made through political action committees (PACs), making the data more comprehensive and sensitive. Furthermore, this study focuses on recent years, providing two distinct advantages. Firstly, it ensures that the data is up-to-date, reflecting the current landscape of political contributions. Secondly, it takes into account the landmark 2010 Supreme Court ruling in Citizens United against FEC<sup>4</sup>, which has significant implications for campaign finance laws and practices. This decision removed restrictions on corporate and union contributions, leading to the rise of Super PACs (Political Action Committees) and increased overall spending in political campaigns.

In addition, while Shon (2010); Huber and Kirchler (2013) focus on contributions and presidential elections, this study specifically focuses on the contributions made to the US House of Representatives. Moreover, it covers a more comprehensive period, spanning ten congresses from the 107th to the 116th, providing a broader and more in-depth analysis of the trends and patterns in political contributions over time. Overall, this study offers a new perspective by utilizing a distinctive data set, considering recent years and legal developments, and focusing on the House of Representatives over a longer period.

### 3.3 Data and Methodology

To test the impact of campaign contributions on contributors' returns, I use two sets of data, campaign contributions of corporations from 2000-2018 that is gathered from the Center for Responsive Politics<sup>5</sup> and return data of the same corporations from 2000 to 2020 that is gathered from the Center for Research in Security Prices (CRSP), US Stock and US Index Databases.

#### 3.3.1 Campaign contributions data

The first source of data are the contributions made by corporations to elected representatives from 2000 to 2018 that is collected from the Center for Responsive Politics.

<sup>&</sup>lt;sup>4</sup>Citizens United versus Federal Election Commission, 558 U.S. 310 (2010), was a landmark decision of the Supreme Court of the United States regarding campaign finance laws and free speech under the First Amendment to the U.S. Constitution. The court held 5–4 that the free speech clause of the First Amendment prohibits the government from restricting independent expenditures for political campaigns by corporations, including nonprofit corporations, labor unions, and other associations.

<sup>&</sup>lt;sup>5</sup> www.opensecrets.org

This data allows me to calculate the amount of money that is contributed to different representatives by a corporation in each election cycle.

This study focuses on contributions that are above \$10,000. As discussed in the previous chapter, \$10,000 is one of the lowest limits on contributions that is applied by Federal Election Commission. Hence focusing on such contributions is to capture the contributors that are more plausibly associated with the "investment" hypothesis rather than "consumption" hypothesis. For each election cycle, all contributions above \$10,000 that are made by a corporation are aggregated. Take Microsoft corp in the 2012 election cycle as an example. Microsoft corp contributed more than \$10,000 to twelve different representatives from both parties worth \$357,350 in total. This is recorded as the contribution data of Microsoft corp in 2012. The data set includes a total of 1520 observations of 254 contributors/corporations that made contributions to winning campaigns for at least two elections<sup>6</sup>. The study only consider contributions to representatives who were elected at least three times and received contributions above \$10,000 from at least one contributor. A 5-year window is the standard time-frame for capturing potential candidate-firm relationships as suggested by Snyder Jr (1992); Cooper et al. (2010), hence including candidates that are elected at least three times is relevant here. In addition to that both Cooper et al. (2010) and Huber and Kirchler (2013) point out the relationship between campaign contributions and financial returns are stronger over longer periods.

Figure 3.1 provides a graphical illustration of the average total contributions to winning candidates per corporation for each election cycle between 2000 and 2018. This data helps to shed light on trends in corporate political contributions over time. The figure shows a clear increase in average total contributions per corporation over the period. Specifically, the amount of campaign contributions per corporation has almost doubled from 2000 to 2018. This is consistent with the previous chapter as it also demonstrated an increase in political spending. The increase in corporate political contributions could be due to a number of factors one of which maybe the change in policy following the 2010 Supreme Court ruling. However, it is clear that corporations are giving more to political campaigns.

In the preceding section, the methodology of using a 2/3 threshold to categorize corporate political contributions have been outlined. To further enrich our understanding and to provide a broader context, it is insightful to consider alternative methods of classification.

<sup>&</sup>lt;sup>6</sup>Before aggregating the data for each corporation in each election cycle the data set contains 20,666 observations. After aggregation, some observations are also omitted due to lack of data on corporations' returns

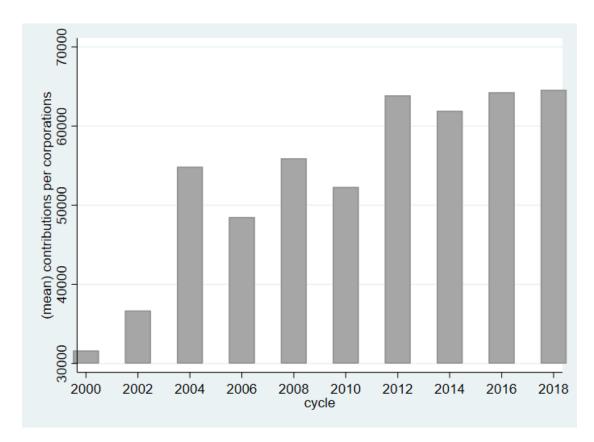


Figure 3.1: Campaign contributions in time

One such method involves categorizing corporations based solely on their exclusive contributions to a single political party. In this approach, a corporation is identified as contributing to either the Democrats or the Republicans if, and only if, 100% of its contributions are directed to one party, with no allocation to the other. This strict classification method surfaces corporations with unequivocal political allegiances, offering a sharp distinction based on explicit political leanings. However, it is important to note that this method might significantly narrow the scope of the analysis. Corporations often distribute their political contributions across both major parties, a strategy aimed at hedging against political uncertainty and maintaining broad-based political influence. Therefore, while this method highlights clear partisan support, it may overlook the pragmatic and strategic aspects of corporate political behavior.

Conversely, the method using the 2/3rd threshold, as employed in the previous chapter, acknowledges the nuances in corporate contributions. By setting a substantial majority as the criterion for categorization, this method recognizes that corporations, while possibly having a preference for one party, often contribute to both. This nuanced approach is more inclusive and reflective of the strategic behavior of corporations in the political arena. It captures a more realistic scenario where corporations aim to maintain favorable relations with key political figures across the spectrum. In extending the analysis of

Table 3.1: Summary Statistics on Contributions

	(1)	(2)	(3)	(4)	(5)
	Obs.	Mean	Std. Dev.	Min.	Max.
Panel A					
to solely Democrat	279	24717.09	20335.93	10025	60.97691
to solely Republican	625	29250.69	22412.9	10011	175950
to Both	616	96492.59	87108.09	20700	544450
Panel B					
to Democrat	380	46355.4	61742.8	10025	544450
to Republican	801	45015.83	52311.16	10011	495311
to Both	339	91281.57	88331.76	20700	517478

Notes: The unit of observation here is the combination of corporations and election cycles. In Panel (A), for each election cycle if corporations contribute to elected representatives from both parties, then contributions are classified as 'to Both'. Otherwise they are classified as 'to solely Democrat' or 'to solely Republican' contributions. Following the example of Microsoft Corp, it made contributions in all 10 election cycles spanning from 2000 to 2018. Out of these 10 cycles, Microsoft contributed to both political parties in 9 of them, while in one election cycle, it solely contributed to Democrat representatives. Therefore, the data includes 9 observations categorized as 'to Both' and 1 observation categorized as 'to solely Democrat' for Microsoft Corp. In Panel (B), for each election cycle if more than 2/3 of an individual corporation's total contribution goes to Democrat representatives, then these contributions are recorded as "to Democrat". Similarly for each election cycle if more than 2/3 of an individual corporation's total contribution goes to Republican representatives, then these contributions are recorded as "to Republican". Finally if contributions to each parties are less than 2/3 of an individual corporation's total contributions, then contributions are recorded as "to Both". The amounts in column (2)-(5) are in US Dollars.

variable construction for political contributions, we can consider two distinct methods: one that categorizes contributions based solely on exclusive support to one party, and another using the 2/3rd threshold as already discussed.

Table 3.1 presents summary statistics of the contributions made by different corporations to political parties. In Panel (A), the data-set includes corporations that made contributions solely to either Democrat or Republican representatives, as well as corporations that contributed to both parties' representatives. The data show that the mean value of contributions made when corporations donate to both political parties is approximately twice the sum of the mean contributions when corporations give solely to Democrats

and to Republicans. To an important extent, this is because the larger firms more typically contribute to both parties, whilst smaller firms are more likely to contribute to just one party. Thus, substantial numbers of corporations allocate more contributions to contribute to both political parties, rather than aligning exclusively with one. The table also provides insights into the total number of contributions made to each group (solely to Democrats, solely to Republicans, and to Both), the minimum and maximum contributions, as well as the standard deviation of the contribution amounts.

In Table 3.1 Panel (B), on the other hand, an alternative threshold is applied to classify corporations' contributions. For each election cycle if more than 2/3 of an individual corporation's total contribution goes to Democrat/Republican representatives, then these contributions are recorded as "to Democrat"/"to Republican". If contributions to each parties are less than 2/3 of an individual corporation's total contributions, then contributions are recorded as "to Both". Application of this threshold increased the number of corporations that contributed to Democrat representatives by 101 and the number of corporations that contributed to Republican representatives by 176, while decreased the number of corporations that contributed to both political parties by 277. It also increased the mean and the standard deviation of contributions 'to Democrat' and 'to Republican' while it slightly decreased the mean of contributions 'to Both'. However the mean value of contributions made to both parties' representatives is approximately twice of the mean contributions 'to Democrat' and 'to Republican' in line with the argument that the larger firms more typically contribute to both parties, whilst smaller firms are more likely to contribute to just one party. These statistics provide a more detailed understanding of the distribution of contributions to different recipients.

#### 3.3.2 Corporations data

The second source of data is the Center for Research in Security Prices (CRSP), US Stock and US Index Databases. The data set provides the information on corporations' returns for the period from 2000-2020. The focus of the analysis will be on cumulative returns (cumtret) of corporations, which is a compounded return from a fixed starting point<sup>7</sup>. This measure will be used to evaluate the impact of contributions made during a given election cycle on a corporation's cumulative returns in the following two years while the representatives are in congress.

In addition to cumulative returns, the study will also use market capitalization (cap) as a control variable. Market capitalization is defined as the share price multiplied by the number of outstanding shares. The CRSP database uses the closing price or the

 $<sup>^{7}</sup>$ The first date that elected representatives are in Congress in the data set is 3rd of January 2001. Hence cumulative return is compounded from 29/12/2000.

absolute value of the bid/ask average from the Price or Bid/Ask Average variable, and the applicable shares observation from the Shares Outstanding Observation Array for each calendar period to calculate market capitalization.

Table 3.2 presents summary statistics of the cumulative returns observed after two-year period following the contributions/elections. In Panel A, the data-set includes cumulative returns observed after two-year period following the contributions/elections of all corporations in each election cycle regardless of the recipient. In Panel B, the data-set is divided into different subsets depending on whether the corporations contribute solely to one party. Panel B indicates that the mean value of cumulative returns observed after two-year period following the contributions/elections are similar across different subsets. Mean cumulative returns of corporations that contribute to both political parties are slightly larger than the mean cumulative returns of corporations that contribute solely to one party. Both Panels show that the standard deviation of cumulative returns reflects a relatively wide range of values within the data set. While the standard deviation of cumulative returns for 'to solely Democrat' and 'to Both' subsets are close to each other, the standard deviation of cumulative returns for 'to Republican' subset is slightly lower compared to other two subsets. Minimum and Maximum values show that there are abnormal returns as well as loss for certain corporations within 20 years time frame<sup>8</sup>. The data set contains 1520 observations for 254 corporations, suggesting that, on average, each corporation has contributed to an election campaign for almost 6 election cycles corresponding to a span of 12 years.

Figure 3.2 illustrates the cumulative returns observed after two-year period following the contributions/elections. The data illustrates a substantial and consistent growth in cumulative return over time, both for the entire data set and also for each subset.

Table 3.3 presents data on the contribution behavior of firms from different industries to representatives' campaigns, along with the corresponding mean contributions and mean market capitalization per firm for an election cycle. The final column supports the Tullock (1972) puzzle which questions why there is relatively little financial involvement in U.S. politics, despite the significant value of public policies at stake. The largest contribution/market capitalization rate equals to 0.00005 that is from Real Estate Management & Development industry. A notable observation from the table is that industries that are more heavily regulated, such as Oil, Gas & Consumable Fuels, Aerospace & Defense, Health Care Providers & Services, Banks, and Consumer Finance tend to have a higher number of firms contributing to election campaigns. Additionally, these firms also exhibit a higher mean market capitalization per firm. This observation is consistent with the notion that corporations may act in their own self-interest, as firms from the

<sup>&</sup>lt;sup>8</sup>This issue will be addressed in more detail in the empirical strategy.

616

(1)(2)(3)(4)(5)Obs. Mean Std. Dev. Max. Min. Panel A -.9923497 All corporations 15203.643313 6.818083 61.63173 Panel B to solely Democrat 279 3.5022527.34421-.9923497 60.97691 to solely Republican 625 3.519071 5.971471 -.9847157 42.05803

Table 3.2: Summary Statistics on Cumulative Returns

Notes: The unit of observation here is the combination of corporations and election cycles. Panel (A) accounts for all corporations, while Panel (B) differentiate between corporations that contribute to elected representatives of both political parties and corporations that contribute to solely one political party. Column (2)-(5) represent the mean, standard deviation, minimum and maximum values of cumulative returns observed over a two-year period following the contributions.

7.361701

-.9754292

61.63173

3.83326

same industry may contribute to campaigns in order to influence regulations in their favor. The higher number of contributions and larger market capitalization per firm suggest that these industries are actively engaged in campaign financing, likely with the goal of shaping regulations in their favor to protect their business interests.

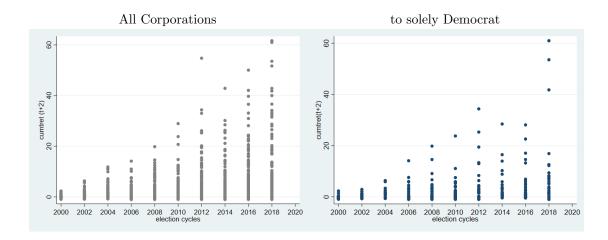
### 3.3.3 Empirical strategy

to Both

To examine the impact of campaign contributions on corporation returns, the following specification is used as in Aggarwal et al. (2012):

$$cumtret_{i(t+2)} = \beta_1(cumtret)_{it} + \beta_2(contributions)_{it} + FEs + \epsilon_{it}$$
 (3.1)

where *i* indexes corporations; *t* indexes time, and represents the election cycle that contributions are made. *cumtret* are the cumulative returns of corporations which is a compounded return from a fixed starting point. *contributions* are the aggregated contributions that are made by a corporation. *FEs* are time, firm, and industry level fixed effects;  $\epsilon_{it}$  is the error term while  $\beta_2$  is the key parameter.



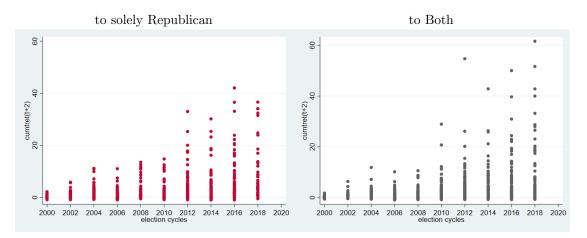


Figure 3.2: Cumulative Returns in Time

Notes: Figure 3.2 illustrates the cumulative returns observed after two-year period following the contributions/elections.

There are few refinements of this specification compared to Aggarwal et al. (2012). While, Aggarwal et al. (2012) look at the excess returns as the dependent variable and use only time fixed effects, this study focuses on the cumulative returns of corporations and accounts for firm level fixed effects in addition to time fixed effects. The inclusion of firm-level fixed effects allow the comparison of return of corporations' with their own (average) returns. Aggarwal et al. (2012) define excess returns as the difference of one-year buy-and-hold returns minus the expected return where they use four-factor model as their benchmark asset pricing model. The use of excess returns allow Aggarwal et al. (2012) to compare the realized returns with potential returns.

This analysis uses cumulative returns, which are compounded returns starting from a fixed point, namely the final day of the 106th Congress on December 29, 2000<sup>9</sup>. This

<sup>&</sup>lt;sup>9</sup>Please see the appendix for additional analysis that employs cumulative returns compounded from the last day of the previous Congress for each election cycle in which corporations contributed to an electoral campaign. Findings are in line with the main analysis.

Table 3.3: Industry level statistics

GIND	No.	firms	Industry	Mean contributions	Mean Market cap.	Ratio (%)
101020	16		Oil, Gas & Consumable Fuels	36531.5	69.63328	0.000000524627017
151010	8		Chemicals	28468.3	20.11747	0.000001415103390
151020	1		Construction Materials	17680	9.778617	0.00000111010000
151040	2		Metals & Mining	19565	15.679815	0.000001247782579
201010	14		Aerospace & Defense	113156	26.121124	0.000001211102010
201010	3		Construction & Engineering	24633.7	5.4416135	0.000004531312691
201030	1		Electrical Equipment	19900.3	37.027568	0.0000004520510550
201040	3		Industrial Conglomerates	114042	166.5	0.000000684936937
201060	5		Machinery	35377.9	21.11044	0.000000034930937
202010	4		Commercial Services & Supplies	37062.3	5.2510535	0.000001073048338
202010	2		Professional Services	76015.7	2.453421	0.000007038009393
203010	3		Air Freight & Logistics	72376.1	35.01638	0.00003093333109
203010	3		Air Freight & Logistics Airlines	37714.2	15.775672	0.000002000921232
203020	1		Marine	28515.7	2.8565965	0.000002390033088
203040	5		Road & Rail	46640.7	23.13056	0.000009982403885
251010	1		Auto Components	15046.7	5.8716355	0.000002010410323
251010	3		Automobiles		38.633192	
	ა 3			61944.8		0.000001603408799
252010			Household Durables	26415.4	4.336542	0.000006091351127
252030	1		Textiles, Apparel & Luxury Goods	51908.7	50.138584	0.000001035304467
253010	12		Hotels, Restaurants & Leisure	35070	19.651546	0.000001784592418
253020	2		Diversified Consumer Services	27724.4	5.7181585	0.000004848484001
254010	2		Media	31605.6	57.725336	0.000000547516952
255020	1		Internet & Direct Marketing Retail	74783.3	354.97	0.000000210657183
255030	1		Multiline Retail	39418.3	37.798584	0.000001042851235
255040	4		Specialty Retail	47277.3	36	0.000001313258333
301010	2		Food & Staples Retailing	56646	171	0.000000331263158
302010	4		Beverages	38230.1	28.326306	0.000001349632388
302020	2		Food Products	26951.4	17.541182	0.000001536464304
302030	2		Tobacco	64046.5	79.550768	0.000000805102221
303010	1		Household Products	25625	178.6	0.000000143477044
303020	2		Personal Products	20302.3	10.039982	0.000002022145060
351010	4		Health Care Equipment & Supplies	29126.3	29.799712	0.000000977402063
351020	17		Health Care Providers & Services	36365.6	18.006836	0.000002019544133
351030	1		Health Care Technology	20038.4	12.265966	0.000001633658531
352010	3		Biotechnology	48115.5	53.334212	0.000000902150762
352020	8		Pharmaceuticals	47281.9	101.4	0.000000466290927
352030	1		Life Sciences Tools & Services	18503.5	48.115936	0.000000384560741
401010	17		Banks	61566.1	69.522952	0.000000885550717
401020	1		Thrifts & Mortgage Finance	21770.3	28.746808	0.000000757311907
402020	7		Diversified Financial Services	38646.1	25.885958	0.000001492936827
402030	15		Consumer Finance	81940	24.90378	0.000003290263566
403010	12		Insurance	60576.6	28.174186	0.000002150074540
451020	1		IT Services	21500	10.877146	0.000001976621441
451030	2		Software	185941	290.2	0.000000640733977
452010	2		Communications Equipment	34474.1	122.4	0.000000281651144
452030	3		Electronic Equipment, I&C	33615.1	16.478726	0.000002039908910
453010	2		Semiconductors & SE	33807.5	119.9	0.000000281964137
501010	6		Diversified Telecommunication Services	58242.2	56.366444	0.000001033277884
501020	2		Wireless Telecommunication Services	22729.1	26.004886	0.000000874031903
502010	2		Media	179508	41.211912	0.000004355730935
502020	2		Entertainment	32993.5	71.846104	0.000000459224623
502030	2		Interactive Media & Services	123542	210.8	0.000000586062619
551010	13		Electric Utilities	68194.2	20.24509	0.000003368431556
551030	8		Multi-Utilities	33354.1	13.876683	0.000002403607548
551050	2		Independent P&R EPs	19525	8.908803	0.000002100001010
601010	5		Equity REITs	37637.1	11.424586	0.000002131032133
601020	1		Real Estate Management & Development	35000	0.71768788	0.000003254333000
001020	-					5.5000 20.01111000

Notes: GIND represents the third level in the hierarchy of the Global Industry Classification Standard (GICS), that is industry. No. firms provide the information on how many firms from the relevant industry is included in the data-set. Mean contributions are Dollar amount of firm contributions per election cycle. Market capitalization is in billion dollars and Ratio represents the ratio of contributions/market capitalization. I&C, SE, P&R EPs, and REITs stand for Instruments and Components, Semiconductor Equipment, Power and Renewable Electricity Producers and Real Estate Investment Trusts respectively.

starting point aligns with the beginning of the study's first Congress, which is the 107th Congress. This approach enables the analysis to consider a range of corporations over a 20-year period. However, the use of cumulative returns introduces a challenge due to the presence of abnormal returns for certain corporations within this time frame. To address

this issue and better account for the trend and past performance of each corporation when making contributions, the analysis incorporates two-year lagged cumulative returns as independent variable.

The choice of cumulative returns as the outcome variable in this study is underpinned by several key considerations. Cumulative returns offer a comprehensive measure of a corporation's financial performance over a specified period, reflecting the compounded effects of market movements and corporate decisions. This is particularly pertinent in analyzing the impact of political contributions on corporate financial outcomes. Unlike simple periodic returns, cumulative returns encapsulate the ongoing value accumulation or erosion, providing a more holistic view of the financial trajectory of corporations over time. This aligns with the study's objective to assess the longer-term financial implications of political contributions, beyond immediate market reactions. Their application in this context allows for a consistent and comparable analysis, facilitating a meaningful interpretation of how political engagements potentially translate into financial outcomes.

Several versions of Equation (3.1) are estimated. First, no control variables are included except for election fixed effects. This shows whether campaign contributions are associated with higher returns or not.

Second, firm-level fixed effects are used in addition to election fixed effects to control for unobserved heterogeneity across firms. By including firm fixed effects in the regression, the time-invariant unobserved heterogeneity across firms are removed from the model. This helps to reduce omitted variable bias and improve the precision of the estimated coefficients on the campaign contributions in the model. Moreover, firm fixed effects also help to identify the effects of time-varying variables that are unique to each firm. Hence, including firm fixed effects can help to obtain more accurate and reliable estimates of the relationship between the financial returns and the campaign contributions. It also addresses the reverse causality <sup>10</sup> as firm-level fixed effects will control for it to some extent.

Third, industry-level fixed effects are used in addition to time fixed effects to test whether the relationship between campaign contributions and financial returns depends on industry level differences. For example, heavily regulated industries might exhibit higher average levels of contributions. Hence, it is important to understand if the relationship between campaign contributions and financial returns are driven by industrial trends or industry-level shocks that affect all firms within a particular industry. The inclusion

<sup>&</sup>lt;sup>10</sup>Arguably, profitable firms are often in a better financial position, which may enable them to have more resources available for contributions.

of industry-level fixed effects can help to make a comparison on the results with firmlevel fixed effects and enable a more accurate estimate of the true effect of campaign contributions on financial returns.

In addition to the specifications above, the regression models will include market capitalization as an additional control variable. Market capitalization will be used as an indicator for firm size and profitability, and its inclusion in the models will allow for the consideration of the potential of the corporation without the influence of campaign contributions. This will help to distinguish the estimation results from the potential financial performance of the corporations, separate from the effects of campaign contributions.

Furthermore, the analysis also addresses different subsets of data to differentiate campaign contributions based on the recipients. This includes corporations that made contributions solely to either Democrat or Republican representatives, as well as corporations that contributed to both parties' representatives. Notably, a substantial number of corporations contributed to both political parties, rather than aligning exclusively with one. Contributions to both parties can be considered as a signal that a corporation is acting in its own self-interest. By considering these different strategies, such as contributions to both parties and contributions to only one party, a more nuanced understanding of the relationship between campaign contributions and financial returns can be obtained. An alternative approach is also applied, using a different threshold to classify contributions as 'to Democrat,' 'to Republican,' and 'to Both'. This information on the recipients of the campaign contributions can help further to distinguish between contributions that are made based on ideological alignment and those that are made to influence policy changes in favor of the corporations' interests.

Finally, a sensitivity analysis will be conducted by splitting the subsets based on the mean value of contributions. This analysis will provide insights into which corporations are driving the results, specifically by examining the size of contributions.

The combination of firm-level fixed effects, two-year lagged cumulative returns and market capitalization as control variables, and differentiation of campaign contributions based on recipients and size can provide a robust and comprehensive analysis of the relationship between campaign contributions and financial performance, accounting for potential confounding factors and shedding light on the nuanced dynamics.

It is relevant to discuss the theoretical underpinnings of the analysis. Firstly, the conceptualization of political contributions as strategic investments by corporations warrants a detailed examination. In this vein, corporate political activity is not merely a civic engagement but a calculated investment aimed at gathering favorable outcomes such

as policy influence, legislative advantages, or regulatory leniency. This perspective is grounded in the resource-based view of firms, where political contributions are resources allocated for competitive benefits.

The expectation, thus, is straightforward: an increase in contributions to both political parties should theoretically augment the likelihood of securing these favorable outcomes. This hypothesis rests on the assumption that a diversified political investment portfolio, involving contributions to both parties, minimizes political risk and maximizes the potential for favorable returns. Empirical literature offers mixed insights into this hypothesis, with some studies indicating a positive correlation between political contributions and financial performance, while others suggest a more nuanced or null relationship.

However, this strategy's effectiveness is nuanced when contributions become heavily partisan. Partisan contributions may reflect riskier corporate strategies and potential governance weaknesses. Firms with such an approach might be compensating for governance deficiencies or focusing on short-term political gains rather than long-term corporate health. This behavior could potentially lead to lower financial returns.

### 3.4 Results

Table 3.4 presents the estimation results for the basic specification for aggregate contributions - regardless of the recipient, with Panel A displaying the results with election, firm and industry level fixed effects. Panel B presents the results with an additional control variable, market capitalization, along with the same fixed effects. In Panel A, Column (1) examines the impact of contributions made to representatives who win the election on cumulative corporation returns over the following two years while the representatives are in congress, with election fixed effects included in the model. Column (2) extends the analysis by incorporating firm fixed effects in addition to the specification in Column (1), while Column (3) includes industry fixed effects in addition to Column (1).

The findings in Panel A do not indicate any statistically significant results apart from the cumulative returns in time t. The strong correlation between the cumulative returns in time t and in time t+2 underlines the importance of accounting for the trend and past performance of each corporation. On the other hand, although the estimated coefficients for contributions are insignificant, their signs are positive.

Upon conducting further analysis in Panel B, it is observed that the previously noted positive relationship between campaign contributions and cumulative returns becomes even less significant and the magnitude of the estimated coefficients are smaller. The

Table 3.4: Baseline Estimations

	(1)	(2)	(3)
	Cum. $Returns(t+2)$	Cum. Returns $(t+2)$	Cum. Returns $(t+2)$
Panel A			
		4. O O O distrib	a a Southele
cum. returns(t)	1.214***	1.008***	1.179***
	(88.96)	(42.39)	(76.97)
contributions	0.0360	0.0406	0.0235
	(0.37)	(0.25)	(0.22)
	1590	1590	1510
N	1520	1520	1512
R-sq	0.863	0.872	0.876
Panel B			
cum. returns(t)	1.215***	1.003***	1.178***
` ,	(88.46)	(41.10)	(76.24)
contributions	0.000624	0.0265	0.00716
	(0.01)	(0.16)	(0.23)
market cap.	0.00109	0.00290	0.000279
•	(1.15)	(1.18)	(0.23)
$\overline{N}$	1503	1503	1495
R-sq	0.863	0.895	0.876
Election FE	Yes	Yes	Yes
Firm FE		Yes	
Industry FE			Yes

t statistics in parentheses

Notes: Each column reports estimates of Equation (3.1), in which the dependent variables are the cumulative returns of corporations in time t+2. Column (1), (2), (3) present results with only election fixed effects, election and firm fixed effects, and election and industry fixed effects respectively. Contributions are in hundred thousand US dollars and market capitalization are in billion US dollars. The inclusion of market capitalization results with loss of 7 observations in Panel B due to missing data while the inclusion of industry-level fixed effects results with loss of 8 observations due to missing industry codes provided by the Global Industry Classification Standard (GICS) for one of the corporations.

introduction of market capitalization, which serves as an indicator of a corporation's size and potential financial performance, reveals that there is an insignificant positive relationship between market capitalization and financial returns. Market capitalization, being a measure of a corporation's overall value in the stock market, helps account for potential confounding effects. Consequently, the insignificant positive relationship between contributions and returns observed in Panel A diminishes, as evident in Panel B.

Table 3.5 presents the same specification as of Table 3.4 Panel B for different subsets

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Table 3.5: Contributions to Different Groups with Market Capitalization

	(1)	(2)	(3)
	Cum. Returns(t+2)	Cum. Returns(t+2)	Cum. Returns $(t+2)$
Panel A (to solely Democrats)			
cum. returns(t)	1.322***	1.004***	1.365***
	(43.94)	(11.86)	(36.05)
contributions	-0.542	-1.068	-0.603
	(-0.66)	(-0.77)	(-0.67)
market cap.	0.0109***	0.0167**	0.00606
	(4.21)	(2.95)	(1.53)
N	279	279	279
R-sq	0.895	0.949	0.922
Panel B (to solely Republicans)			
cum. returns(t)	1.195***	1.009***	1.555***
	(54.55)	(25.46)	(45.89)
contributions	-0.773	-1.323*	-0.726
	(-1.87)	(-2.26)	(-1.67)
market cap.	-0.00172	-0.0102	-0.000519
	(-1.14)	(-1.70)	(-0.29)
N	625	625	622
R-sq	0.860	0.906	0.879
Panel C (to Both)			
cum. returns(t)	1.185***	0.747***	1.106***
	(55.27)	(15.49)	(43.00)
contributions	0.0728	0.365	0.148
	(0.54)	(1.57)	(0.95)
market cap.	-0.000128	0.00126	-0.0000949
	(0.09)	(0.35)	(-0.05)
$\overline{N}$	609	609	604
R-sq	0.860	0.912	0.878
Election FE	Yes	Yes	Yes
Firm FE		Yes	
Industry FE			Yes

t statistics in parentheses

Notes: Each column reports estimates of Equation (3.1), in which the dependent variables are the cumulative returns of corporations in time t+2. Column (1), (2), (3) present results with only election fixed effects, election and firm fixed effects, and election and industry fixed effects respectively. Contributions are in hundred thousand US dollars and market capitalization are in billion US dollars. Panel A, B, C present corporations that contributed to solely Democrat, to solely Republican and to both parties representatives, respectively.

depending on whether the corporations donate solely to one party. While the first two panels show corporations that made contributions solely to either Democrat or Republican representatives, the last panel shows estimation results for corporations that contributed to both parties' representatives.

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

The sign of the coefficient estimate for contributions are negative in Panel A and B, when firm level fixed effects are used. However, as in Table 3.4 none of them are statistically significant for the subset that accounts for corporations contributed to solely Democrats (Panel A). Contributions that are made solely to Democrats and Republicans (in a certain election cycle) can be considered as contributions that are ideologically motivated. Arguably these motivations are separate from profit-motivated contributions. Thus ideologically motivated campaign contributions to Democrats has no significant impact on corporation returns and the sign of the coefficient estimate for contributions is negative. On the other hand, Panel B of Table 3.5 considers contributions to solely Republicans. Contributions to solely Republicans exhibit a significant negative relationship with corporation returns when it is accounted for firm-level fixed effects in the specification as shown in Column (2) of second panel. When firm-level fixed effects are incorporated, it is estimated that a \$100,000 (the mean of contributions 'to solely Republicans' is 29,250) increase in contributions is associated with a -1.323 (the mean of cumulative returns of 'to solely Republican' is 3.52) unit decrease in the cumulative returns of corporations that exclusively contributed to Republican representatives. Hence, considering the mean values of contributions and cumulative returns of 'to solely Republicans', tripling contributions is associated with 37.5% decrease in cumulative returns. In Column (3) the estimated impact of contributions on corporation returns are not significant suggesting that results in Column (2) are not driven by industry specific differences. Hence the decrease in corporation returns are independent from industrial trends and/or shocks. As a result if contributing to solely one political party is considered as a sign of contributing ideologically, ideologically motivated campaign contributions to Republicans and Democrats are negatively correlated with corporation returns. However, this negative correlation is only statistically significant for Republicans, while it is insignificant for Democrats. Thus, contributing ideologically has no benefits for corporations and if there is any impact it decreases the returns of corporations in the following two years when the representatives are in congress. These findings supports Aggarwal et al. (2012) as they suggest worse corporate governance is associated with larger donations.

Panel C presents estimation results for contributions that are made to both political party. Contributing to both political parties (rivals) can be considered as strategic contribution as clearly it is not ideologically motivated. Results on contributions for corporations that contributed to both political are not significant, however the sign of the coefficient estimate for contributions is positive. Considering the negative sign of the coefficient estimates for contributions to one political party, the findings suggest that if a corporation decides to contribute to electoral campaigns, it is financially more beneficial for them to contribute to both political parties. The positive coefficient estimate for contributions in Panel C suggests that corporations that diversify their contributions

Table 3.6: Contributions to Different Groups with Market Capitalization

	(1)	(2)	(3)
	Cum. Returns(t+2)	Cum. Returns(t+2)	Cum. Returns(t+2)
Panel A (to Democrats)			
cum. returns(t)	1.336***	1.078***	1.329***
( )	(49.71)	(17.20)	(39.95)
contributions	-0.0845	0.510	-0.0215
	(-0.34)	(0.99)	(-0.08)
market cap.	0.00496**	0.00711	0.00205
	(2.60)	(1.54)	(0.69)
N	380	380	380
R-sq	0.888	0.929	0.908
Panel B (to Republicans)			
cum. returns(t)	1.217***	0.992***	1.175***
	(61.39)	(27.55)	(50.65)
contributions	0.0885	-0.368	0.162
	(0.54)	(-1.36)	(0.93)
market cap.	-0.00200	-0.00525	-0.000489
	(-1.48)	(-1.05)	(-0.30)
N	801	801	796
R-sq	0.855	0.904	0.871
Panel C (to Both)			
cum. returns(t)	1.084***	0.642***	0.996***
	(42.10)	(11.61)	(31.22)
contributions	0.0283	0.234	-0.0704
	(0.17)	(0.81)	(-0.34)
market cap.	0.0000870	-0.000185	-0.00273
	(0.05)	(-0.04)	(-1.00)
N	339	339	336
R-sq	0.872	0.950	0.901
Election FE	Yes	Yes	Yes
Firm FE		Yes	<b>3</b> 7
Industry FE			Yes

t statistics in parentheses

Notes: Each column reports estimates of Equation (3.1), in which the dependent variables are the cumulative returns of corporations in time t+2. Column (1), (2), (3) present results with only election fixed effects, election and firm fixed effects, and election and industry fixed effects respectively. Contributions are in hundred thousand US dollars and market capitalization are in billion US dollars. Panel A, B, C present corporations that are classified 'to Democrat', 'to Republican' and 'to Both' parties representatives, respectively.

across both political parties may potentially achieve higher financial returns compared to corporations that contribute to a single political party.

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Table 3.6 presents the same specification as of Table 3.5, using a different threshold to classify contributions as 'to Democrat,' 'to Republican,' and 'to Both'. For each election cycle if more than 2/3 of an individual corporation's total contribution goes to Democrat/Republican representatives, then these contributions are recorded as 'to Democrat'/'to Republican'. If contributions to each parties are less than 2/3 of an individual corporation's total contributions, then contributions are recorded as "to Both". The alternative classification leads to an increase in the number of observations for the 'to Democrats' subset by 101 and the 'to Republicans' subset by 176. Thus, there is a decrease in the number of observations for the 'to Both' subset by 277.

In Table 3.6, Panel A reveals that the sign of the coefficient estimate for contributions to Democrats has flipped and become positive compared to Table 3.5 Panel A, although it remains statistically insignificant. In Panel B, on the other hand, the previously estimated significant negative impact of contributions on the cumulative returns of corporations that solely contributed to Republican representatives becomes statistically insignificant. However, the sign of the coefficient estimate for contributions remains negative. 'to Both' subset in Table 3.6 Panel C shows that both the magnitude and the significance level of the coefficient estimate for contributions decrease.

Despite the notable interchange among the subsets, the results presented in Table 3.6 emphasize that the relationship between campaign contributions and cumulative returns is not particularly strong. Hence, when the classification restrictions are relaxed, the estimation results for all panels become statistically insignificant. This suggests that the impact of campaign contributions on cumulative returns is not sufficiently robust to maintain statistical significance under alternative classifications.

Finally Table 3.7 presents results on the impact of contributions on cumulative returns by accounting for large and small contribution subsets. The estimation results are not statistically significant for contributions and the sign of the coefficient estimate for contributions is positive in Panel A and Panel B. Both the magnitude and the significance level are larger for large contributions compared to small contributions as anticipated. However, further analysis also fail to provide a robust significant relationship.

After employing various specifications, the research findings reveal there is not a robust relationship between campaign contributions and corporate returns. Although the sign of the coefficient estimate for contributions is positive for corporations contributed to both political parties, these contributions does not have a statistically significant impact on corporate returns. However, a distinction emerges when examining corporations that contribute solely to either Democrats or Republicans. For such corporations the impact of campaign contributions is either insignificant or negatively correlated with cumulative returns. This suggests that corporations, which may be acting in a strategic manner

Table 3.7: Large - Small Contributions

	(1)	(2)	(3)
	Cum. Returns $(t+2)$	Cum. Returns $(t+2)$	Cum. $Returns(t+2)$
Panel A			
cum. returns(t)	1.249***	0.794***	1.160***
	(46.26)	(12.97)	(35.08)
contributions	0.0877	0.334	0.144
	(0.55)	(1.31)	(0.82)
market cap.	0.00393*	0.00508	0.00245
marner cap.	(2.58)	(1.31)	(1.02)
$\overline{N}$	446	446	440
R-sq	0.858	0.915	0.869
Panel B			
	4 4 0 0 destrib	4 O O Addition	a a so dedele
cum. returns(t)	1.199***	1.004***	1.170***
	(76.83)	(36.44)	(66.04)
contributions	0.458	0.189	0.293
	(0.82)	(0.28)	(0.51)
market cap.	-0.00166	-0.00465	-0.00120
1	(-1.29)	(-1.04)	(-0.79)
$\overline{N}$	1074	1074	1072
R-sq	0.869	0.905	0.880
Election FE	Yes	Yes	Yes
Firm FE	100	Yes	100
Industry FE		169	Yes

t statistics in parentheses

Notes: Each column reports estimates of Equation (3.1), in which the dependent variables are the cumulative returns of corporations in time t+2. Column (1), (2), (3) present results with only election fixed effects, election and firm fixed effects, and election and industry fixed effects respectively. Contributions are in hundred thousand US dollars and market capitalization are in billion US dollars. Panel A reports contributions that are larger than the mean contributions (55,669), while Panel B reports contributions that are smaller than the mean.

rather than driven by ideological motivations, tend to experience "the positive" effect by not being affected negatively.

There are certain limitations of the suggested models that need to be acknowledged. Firstly, the number of corporations included in this study is limited due to data availability. The data set used in this study only includes 254 corporations as a result of not being able to access to all corporations that contributed to an elected representative.

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

This limitation may impact the generalizability of the findings to a larger population of corporations.

Secondly, while two year lagged cumulative return, firm-level and industry-level fixed effects, along with market capitalization, are included in the models, there are other important firm characteristics that cannot be incorporated into this study, such as asset structure, liquidity, business risk, and growth potential. Therefore, the impact of political contributions on the outcomes studied may be overestimated or not fully captured. Despite these limitations, the implications of this study are still valuable and relevant. The findings contribute to our understanding of the relationship between political contributions and corporate behavior.

Finally, the strategic motivations behind political contributions can be multifaceted and not solely aimed at immediate financial returns. These might include long-term relationship building, influence on non-financial regulations, or corporate social responsibility objectives. These strategic nuances are challenging to capture quantitatively.

#### 3.5 Conclusion

The findings of this research paper shed light on the relationship between campaign contributions and corporation returns and extend the existing literature using new set of data from the Center for Responsive Politics and the Center for Research in Security Prices. By employing different empirical strategies, this study extends the existing research and contributes to understanding of the impact of campaign contributions on corporate financial performance.

In contrast to the previous findings in the literature (Shon 2010; Cooper et al. 2010; Huber and Kirchler 2013), this study indicates a negative association between campaign contributions and cumulative returns of corporations as Aggarwal et al. (2012) if contributions are made to solely Republican representatives. However, when contributions are made solely to Democrats or to both political parties, the relationship between campaign contributions and cumulative returns is not statistically significant, suggesting that campaign contributions does not serve as political investment. On the other hand, when the restrictions on the classification of contributions are relaxed, the negative association of the contributions majorly made to Republican representatives and cumulative returns is also statistically insignificant. In line with different studies (Ansolabehere et al. 2003; Aggarwal et al. 2012; Fowler et al. 2020) in the literature that have suggested campaign contributions are akin to consumption expenditures, this research finds no evidence that campaign contributions can be viewed as investments.

It is important to note that this research has certain limitations, including data availability constraints and potential omitted variable bias. Future research could explore additional factors, such as firm-specific characteristics, to further refine our understanding of the relationship between campaign contributions and corporate returns. Despite these limitations, the findings of this study contribute to the growing body of literature on the topic and shed light on the role of campaign contributions in the context of corporate financial performance.

### Chapter 4

### Conclusion

This thesis examines important aspects of the political economy literature, the impact of counter-terrorism and terrorism on voting behavior, the impact of campaign contributions on the ideological positioning of representatives and corporations' financial returns. By applying different methodological approaches and data settings to answer the research questions, this work provides a greater understanding in these specific fields within the political economy discipline. It focuses on terrorism and counter-terrorism's impact on voting behaviour in the case of Turkey (Chapter 1), the role of campaign contributions on the ideological positioning of the US House of Representatives (Chapter 2), and the impact of campaign contributions on the corporations' financial returns in the US (Chapter 3). The conclusion reviews the contributions of this thesis in light of the current relevant literature, and outlines the implications of the findings.

In Chapter 1, this thesis presents empirical evidence indicating that terror attacks can influence political support in distinct ways. The study reveals that such attacks tend to increase support for the political party associated with the perpetrators, while decreasing support for the national incumbent. However, the impact of terror attacks varies depending on the presence of counter-terrorism measures, such as curfews. When curfews are implemented in municipalities that have experienced terror attacks, they clear away the effects of the attacks on both the political party associated with the perpetrators and the national incumbent. Conversely, when curfews are implemented in non-attacked municipalities, they are found to decrease support for the national incumbent, but have no significant impact on the party associated with the perpetrators. Additionally, curfews are estimated to have spillover effects, leading to a decrease in the vote share of the party associated with the perpetrators in neighboring municipalities. The estimated impacts of counter-terrorism measures, like curfews are sizable, as they directly contribute to a decrease in the vote share of the national incumbent by 4.72

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percentage points, and indirectly result in a decrease of 3.77 percentage points for the pro-Kurdish political party in neighboring municipalities. These findings suggest that the mixed results in the existing literature on the electoral consequences of terrorism may be attributed to unobserved heterogeneity in counter-terrorism measures. The results on socio-economic variables in Chapter 1 reveal that curfews have stronger effects in municipalities that are more urbanized and have higher literacy rates. These insights on socio-economic variables can prepare the ground to explore the complex mechanism on how and through which channels terrorism and counter-terrorism affect the electorate's political preferences.

A limitation here is the potential unobserved heterogeneity in counter-terrorism measures. The socio-economic variables revealed that curfews have stronger effects in more urbanized municipalities with higher literacy rates. This suggests the need for further research to understand the complex mechanisms through which terrorism and counter-terrorism affect political preferences and voting behavior, especially considering socio-economic factors.

Chapter 2 emphasizes the important role of money in shaping the political landscape by affecting the ideological stances of elected representatives. It indicates that campaign contributions tend to have a centripetal effect on elected Representative's ideological stances, meaning that it tends to flow towards the political centre. Furthermore, the research shows that money can have a depolarizing effect on the US House of Representatives, potentially reducing the incentive for the elected representatives to adopt extreme positions or engage in partisan politics. The findings suggest that an additional \$100,000 of "Republican money" and "split-ticket" contributions are estimated to lead representatives to 0.0105 and 0.0138 points more liberal on the ideological spectrum, respectively. It is important to note that these results are driven by the Republican representatives. The impact of campaign contributions is particularly strong when there is limited political competition. Conversely, the impact of "Democrat money" contributions is only statistically significant in cases where there is high competition, and the effects of "Republican money" and "split-ticket" contributions are comparatively lower. Finally, the research highlights that the impact of "split-ticket" contributions is stronger for junior representatives, while the impact of "Republican money" is stronger for senior representatives.

A potential limitation of Chapter 2 could be the difficulty in fully capturing the motivations behind corporate contributions. While financial contributions can be quantified, the underlying strategic considerations, such as expected favors, policy influence, or ideological sympathy, are more challenging to measure and interpret.

The findings presented in Chapter 3 provide insights into the relationship between campaign contributions and corporate returns, using a new data set obtained from the Center for Responsive Politics and the Center for Research in Security Prices. By employing various empirical approaches, Chapter 3 expand upon existing research and enhance our understanding of the impact of campaign contributions on corporate financial performance. In line with the previous findings in the literature (Aggarwal et al. 2012), this study reveals a negative correlation between campaign contributions and the cumulative returns of corporations when the contributions are made exclusively to Republican representatives. However, when contributions are made solely to Democrats or to both political parties, the relationship between campaign contributions and cumulative returns is not statistically significant. This suggests that campaign contributions do not function as a form of political investment. Furthermore, when the classification of contributions is relaxed, the negative association between contributions made to Republican representatives and cumulative returns also becomes statistically insignificant. These results suggest that campaign contributions are more akin to consumption expenditures rather than investments.

Chapter 3's limitations include a limited data set covering only 254 corporations due to data availability constraints. This limitation might affect the generalizability of the findings to a broader population of corporations. Additionally, while the models include certain factors like two-year lagged cumulative return, firm-level and industry-level fixed effects, and market capitalization, they do not incorporate other important firm characteristics such as asset structure, liquidity, business risk, and growth potential. This could result in the overestimation or incomplete capture of the impact of political contributions on the studied outcomes.

The findings of Chapter 2 and 3 suggest a need for more transparent systems regarding corporate political contributions. Policies could be developed to ensure full disclosure of contributions, not just in terms of amounts but also in the context of their distribution across different political entities. This transparency can help in monitoring corporate influence in politics and maintaining a fair political playing field. Policymakers could also consider implementing enhanced reporting requirements for corporations, requiring them to disclose not only their political contributions but also their intentions and expected outcomes from these contributions. This could include the rationale behind choosing specific parties or candidates, aiming to make the process more transparent and accountable.

## Appendix A

Table A.1: Baseline Estimation with TPCONED

	Incumbent (AKP)	Pro-Kurdish (HDP)	Voting Turnout
Terror	-3.462**	3.443*	1.594*
	(1.04)	(1.52)	(0.62)
Curfew	-4.781*	0.606	3.046*
	(2.15)	(2.77)	(1.34)
Terror-Curfew	3.819	-3.571	-3.140
	(2.34)	(3.13)	(1.59)
N	396	396	396
R-sq	0.673	0.709	0.213
Election FE	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes

Notes: Each column reports estimates of Equation (1), in which the dependent variables are the vote share of the incumbent (AKP), the pro-Kurdish (HDP) political party, and the voting turnout at municipality level. In parentheses are robust standard errors. \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

Table A.1 shows the baseline estimation with The Turkish State-PKK Conflict Event Database. When the results are compared with Table 3, all findings are in the same line with slight differences. The absolute impact of terror attacks as well as curfews on the AKP slightly increased without any change in significance level. On the other hand the impact of terror attacks on the HDP support slightly decreased from 3.67 to 3.44. Overall there is no significant difference between the results of this study's data set and TPCONED.

Table A.2 presents the estimation of basic specification for all political parties that are in the parliament at that time. Column 1-5 shows the effect of only terror, only curfew and both terror and curfew on the percentage vote shares of the incumbent party, the pro-Kurdish party, the secular party, the nationalist party and voting turnout rate respectively. There is no significant effect of *Terror*, *Curfew*, and *Terror-Curfew* on the CHP. On the other hand, *Curfew* increases MHP's vote share by 1.19 percentage points.

Table A.2: Baseline Estimation with All Political Parties in the Parliament

	Incumbent (AKP)	Pro-Kurdish (HDP)	Secular (CHP)	Nationalist (MHP)	Voting Turnout
Terror	-3.204**	3.670**	-0.0926	-0.678	1.351*
	(-2.78)	(2.87)	(-0.08)	(-0.86)	(2.23)
Curfew	-4.723*	0.657	-1.340	1.190**	2.991*
	(-2.20)	(0.24)	(-0.88)	(3.26)	(2.24)
Terror-Curfew	3.574	-3.786	2.503	0.610	-2.909
	(1.50)	(-1.25)	(1.35)	(0.80)	(-1.84)
N	396	396	396	396	396
Election FE	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes

Notes: Each column reports estimates of Equation (1), in which the dependent variables are the vote share of the incumbent (AKP), the pro-Kurdish (HDP) political party, the secular (CHP), the nationalist (MHP) and the voting turnout at municipality level. In parentheses are t statistics. \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

The impact of curfew on MHP is 30 per cent considering the mean vote share (3.93) of it among focus group municipalities. This reveals that people, who voted for AKP and found curfew as a harsh measurement, vote for the same wing (right) but different political party. These effects of curfew are in line with the theoretical arguments of Berrebi and Klor (2006) as they claim right wing parties, and in particular nationalist parties more than religious parties, increase their votes after strong measurements against terrorism.

# Appendix B

Table B.1: Baseline Estimation with State x Time FEs

	(1)	(2)	(3)	(4)
	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim1
Republican money	-0.102***	2.779***	1.108***	-0.104***
	(-3.39)	(21.51)	(13.19)	(-3.69)
Democrat money	0.0440	-1.509***	-0.842***	0.0248
	(1.67)	(-13.35)	(-12.06)	(1.01)
split-ticket money	-0.121***	-0.353**	-0.351***	-0.102***
	(-4.23)	(-2.67)	(-4.13)	(-3.76)
Time FE		Yes	Yes	Yes
Time x State FE	Yes			
State FE		Yes		
District FE			Yes	
Representative FE	Yes			Yes
N	3456	3456	3456	3456
R-sq	0.986	0.364	0.836	0.988

Notes: Each column reports estimates of Equation (2.1), in which the dependent variables are the ideology scores of all representatives including both Republicans and Democrats. The amounts of "Republican money", "Democrat money" and "split-ticket money" are in million US dollars. t statistics in parentheses, and \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

Table B.1 presents baseline results with an additional fixed effect (Time x State FE) included in the model shown in Column 1. These results align closely with those in Column 4, which constitute the main findings of the chapter. When comparing Column 1 and Column 4, the magnitude of Republican money slightly decreases, whereas the magnitude of split-ticket money increases. More significantly, the influence of Democrat money shows a considerable increase in terms of its significance.

Furthermore, Table B.1 substantiates the claim that money exerts a centripetal impact on US politics in general, highlighting the converging nature of political contributions towards the center of the political spectrum. The findings presented in Table B.1 reinforces the core findings of the chapter.

Table B.2 presents the results using Nokken-Poole 'Dimension 2' ideology scores, which focus on cultural and social issues. It's important to note that there can be 'socially conservative' Democrats as well as 'socially liberal' Republicans. Hence, 'Dimension 2'

Table B.2: Baseline Estimation (Nokken Poole Dimension 2)

	(1)	(2)	(3)	(4)
	Nokken-poole Dim2	Nokken-poole Dim2	Nokken-poole Dim1	Nokken-poole Dim2
Republican money	0.469***	-0.123	-0.0349	0.183*
	(4.35)	(-1.26)	(-0.39)	(2.23)
Democrat money	-0.336***	0.0760	0.234**	0.0258
	(-3.50)	(0.89)	(3.11)	(0.36)
split-ticket money	0.398***	0.707***	0.726***	0.405***
	(3.53)	(7.09)	(7.92)	(5.10)
Time FE	Yes	Yes	Yes	Yes
State FE		Yes		
District FE			Yes	
Representative FE				Yes
N	3456	3456	3456	3456
R-sq	0.022	0.289	0.628	0.793

Notes: Each column reports estimates of Equation (2.1), in which the dependent variables are the Nokken-poole Dimension 2 ideology scores of all representatives including both Republicans and Democrats. The amounts of "Republican money", "Democrat money" and "split-ticket money" are in million US dollars. t statistics in parentheses, and \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

scores range from -1 to 1 for both parties. The findings indicate that for the Nokken-Poole Dimension 2, the estimated impact of 'Republican money' supports the ideological hypothesis on cultural and social matters. However, as with Dimension 1, there is no significant impact of 'Democrat money.' It is crucial to highlight that, unlike economic issues, when examining social and cultural issues, there may also be shifts over time in the ideology scores of both Republicans and Democrats. For example, considering LGBTQ+ rights, there could be a trend towards more liberal positions over time among all representatives, regardless of their political affiliation.

Table B.3 presents the baseline estimations along with additional controls, providing a more nuanced understanding of the data. Specifically, age refers to the age of each representative, last race serves as an indicator for the final electoral race of each representative, and time in congress signifies the number of terms a representative has been elected. The findings from this table corroborate the main analysis for both Republicans and Democrats. Among the additional more individual level controls, only last race shows significance for Republicans. However, the inclusion of last race as a variable does not alter the main findings of interest. This consistency underscores the robustness of the primary results, even when factoring in these additional representative-specific variables.

Finally Table B.4 presents baseline estimation with party affiliation using an alternative cut-off value for assignment of money. In the main analysis, a 2/3 cut-off is applied for classifying contributions. However, to examine the impact of money on the ideology of representatives from different parties, this analysis employs a different method. For each election cycle if more than 80% of an individual contributor's total contribution

Table B.3: Baseline Estimation with Additional Controls and Party Affiliation

	(1)	(2)	(3)	(4)
	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim
		(a) Republicans		
Republican money	-0.0629	-0.0190	-0.0529	-0.101**
	(-1.04)	(-0.37)	(-1.34)	(-3.10)
Democrat money	-2.059***	-0.890*	0.158	0.171
	(-4.86)	(-2.54)	(0.61)	(0.84)
split-ticket money	-0.478***	-0.350***	-0.251***	-0.134***
	(-6.62)	(-5.77)	(-5.21)	(-3.44)
age	-0.000464	-0.000679	0.000660	-0.0161
	(-1.01)	(-1.72)	(1.31)	(-0.75)
last race	-0.00789	-0.00668	-0.00876	-0.0125*
	(-0.63)	(-0.65)	(-1.21)	(-2.16)
time in congress	-0.00570***	-0.00575***	-0.00854***	-0.00860
	(-5.06)	(-5.63)	(-7.26)	(-0.40)
N	1757	1757	1757	1757
R-sq	0.127	0.446	0.795	0.881
		(b) Democrats		
Republican money	1.068***	0.666**	0.125	0.0633
	(4.34)	(2.81)	(0.78)	(0.49)
Democrat money	0.178***	0.232***	0.0846**	0.0186
	(4.75)	(6.52)	(3.27)	(0.84)
split-ticket money	0.363***	0.346***	0.0508	-0.0614
	(5.62)	(5.55)	(1.11)	(-1.56)
age	-0.00127***	-0.00117***	-0.00162***	0.0141
	(-3.71)	(-3.37)	(-4.51)	(1.03)
last race	0.0268*	0.0145	-0.00116	-0.00677
	(2.31)	(1.35)	(-0.17)	(-1.17)
time in congress	-0.00417***	-0.00331***	-0.00260***	-0.0184
	(-5.37)	(-4.30)	(-3.42)	(-0.78)
N	1699	1699	1699	1699
R-sq	0.131	0.294	0.778	0.859
Time FE State FE	Yes	Yes Yes	Yes	Yes
District FE		105	Yes	
Representative FE				Yes

goes to Republican candidates, then these contributions are recorded as "Republican" money. Similarly, if more than 80% of an individual contributor's total contribution goes to Democrat candidates, then these contributions are recorded as "Democrat" money.

Table B.4: Alternative Cut-off with Party Affiliation

	(1)	(2)	(3)	(4)
	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim1	Nokken-poole Dim1
		(a) Republicans		
Republican money	0.128	0.185**	0.0642	-0.130**
	(1.74)	(2.96)	(1.31)	(-3.23)
Democrat money	-3.831***	-1.373	-0.168	0.447
·	(-4.15)	(-1.78)	(-0.30)	(1.04)
split-ticket money	-0.497***	-0.369***	-0.260***	-0.108***
	(-9.95)	(-8.78)	(-7.46)	(-3.77)
N	1757	1757	1757	1757
R-sq	0.099	0.423	0.783	0.881
		(b) Democrats		
Republican money	1.790**	1.121*	-0.0175	-0.0456
	(3.05)	(2.05)	(-0.05)	(-0.16)
Democrat money	0.274***	0.305***	0.136***	0.0177
·	(6.62)	(7.76)	(4.77)	(0.73)
split-ticket money	0.292***	0.277***	0.0610	-0.0295
•	(6.02)	(5.91)	(1.63)	(-0.94)
N	1699	1699	1699	1699
R-sq	0.070	0.259	0.763	0.859
Time FE	Yes	Yes	Yes	Yes
State FE		Yes		
District FE			Yes	
Representative FE				Yes

Notes: Each column reports estimates of Equation (2.1), in which the dependent variables are the ideology scores of representatives. The data set is divided into two subsets based on the party affiliation. While Panel (a) reports estimates for Republican representatives, Panel (b) reports estimates for Democrat representatives. The amounts of "Republican money", "Democrat money" and "split-ticket money" are in million US dollars. t statistics in parentheses, and \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

If the contributions to both separate parties are less than 80% of total donations, then the money is recorded as "split-ticket".

The results show that that the centripetal effect is robust with these alternative cutoff values. Findings in Table B.4 Panel (a) Column (4) align with those in Table 2.5.
According to Table B.4 Panel (a) Column (4), an additional \$100,000 of "split-ticket
money" and "Republican money" are estimated to make Republican representatives
0.0108 and 0.013 points more liberal respectively, which further supports the main findings with party affiliation. The same centripetal effect is there and it is greater for the
"Republican money" while it is smaller for the "split-ticket money" contributions. There
are no significant impact in Table B.4 Panel (b) as in Table 2.5. The main difference
in Table B.4 Panel (b) is a lower significance level for "split-ticket money" compared to
Table 2.5.

# Appendix C

Table C.1: List of Corporations

Name	Name	Name	Name	Name
Oracle Corp	FirstEnergy Corp	Kirby Corp	Station Casinos	United Parcel Service
Microsoft Corp	Scana Corp	American Express	AstraZeneca Pharmaceuticals	Edwards Lifesciences
Honeywell Int.	Progress Energy	Intel Corp	Boyd Gaming	MetLife Inc
TCF Financial	CMS Energy	Bank of America	NVR Inc	Monsanto Co
Cerner Corp	Textron Inc	Travelers Companies	Shaw Group	Aetna Inc
Coca-Cola Co	Cintas Corp	PNC Fin. Services	Eastman Chemical	Fluor Corp
DTE Energy	Public Service Ent. Grp.	CenturyLink	Simon Property Group	Nustar Energy
II-VI Inc	Entergy Corp	FedEx Corp	Copart Inc	IDT Corp
Exxon Mobil	American Electric Power	American Fin. Grp.	GEO Group	Peabody Energy
MGM Resorts Int.	NextEra Energy	Leggett Platt	Capital One Financial	Rockwell Collins Inc
KKR Co	Constellation Energy	AON Corp	McKesson Corp	Credit Suisse Securities
General Dynamics	Ashland Inc	Thermo Fisher	Apollo Education Group	Anthem Inc
General Electric	Northrop Grumman	CSX Corp	Insight Enterprises	Kindred Healthcare
Huntington Ingalls Ind.	Raytheon Co	Wendy's Int.	Rent-A-Center	Prudential Financial
Marathon Petroleum	Ameren Corp	Brown&Brown Ins.	AmerisourceBergen Corp	Mantech International
Pandora Media	Schering-Plough Corp	Cigna Corp	Washington Mutual	Comcast Corp
Oaktree Capital Mgt.	Comerica Inc	L Brands	Darden Restaurants	Wynn Resorts
Carlyle Group	Harris Corp	Norfolk Southern	DISH Network	CME Group
Facebook Inc	Ford Motor Co	Constellation Brands	Freeport-McMoRan	Genworth Financial
PGE Corp	Walt Disney Co	Dominion Resources	DaVita Inc	QC Holdings
Altria Group	Duke Energy	RPM International	Henry Schein Inc	Google Inc
ConocoPhillips	Pinnacle West Capital	Verizon Comm.	Estee Lauder Companies	Las Vegas Sands
Amgen Inc	Air Products Chem. Inc	SBC Comm.	Hartford Financial Services	Herbalife Nutrition
Marcus Millichap	Brown-Forman Corp	US Bancorp	Worthington Industries	Alpha Natural Resources
Chevron Corp	Cubic Corp	Home Depot	Genesee Wyoming	NASDAQ Inc
Timken Co	Forest City Enterprises	American Int. Grp.	Zions Bancorp	LHC Group
Vulcan Materials	Occidental Petroleum	SunTrust Banks	NCR Corp	Oshkosh Corp
Edison International	Regions Financial	Barclays Capital	Amazon.com	Fidelity National Financial
Goodyear Tire Rubber	Wachovia Corp	Toll Brothers Inc	Qwest Communications	United Airlines
General Mills	Wells Fargo	Anadarko Petroleum	CoreCivic Inc	Energy Transfer Partners
United Technologies	NiSource Inc	Citigroup Inc	Valero Energy	Leidos Inc
Procter Gamble	Sprint Corp	Ecolab Inc	PMA Group	Emergent BioSolutions
Southern Co	Weyerhaeuser Co	National HealthCare	Best Buy	Spirit Aerosystems
Caterpillar Inc	DXC Technology	State Street Bank	Waddell Reed	Time Warner Cable
Deere Co	Cummins Inc	GlaxoSmithKline	Level 3 Communications	Delta Air Lines
Boeing Co	Huntington Bancshares	Carnival Corp	L3 Technologies	T-Mobile USA
Synovus Fin. Grp.	McDonald's Corp	Cash America Int.	Federated Investors Inc	Clean Energy Fuels Corp
Abbott Labs.	Eversource Energy	Arch Coal	Sempra Energy	Blackstone Group
Dow Chemical	Invacare Corp	Lyondell Chemical	DaimlerChrysler	Discover Financial Services
American Airlines	JPMorgan Chase Co	Allergan Inc	Park Place Entertainment	Masimo Corp
Lockheed Martin	Humana Inc	Cisco Systems	Morgan Stanley	EnergySolutions Inc
Cardinal Health	Union Pacific Corp	Safeway Inc	Corinthian Colleges	Calpine Corp
Exelon Corp	Target Corp	MBNA Corp	Argon ST	UnitedHealth Group
Pfizer Inc	Bank of New York Mellon	Health Net Inc	CONSOL Energy	Select Medical Corp
Emerson Electric	Potlatch Corp	Qualcomm Inc	CompuCredit Corp	General Motors
Johnson Johnson	BNSF Railway	Gilead Sciences	Goldman Sachs	International Game Technology
Corning Inc	URS Corp	Warner Music Group	RJ Reynolds Tobacco	Anheuser-Busch
PPL Corp	Eli Lilly Co	Express Scripts	HSBC North America	UBS Americas
3M Co	Walmart Inc	Tyson Foods	Devon Energy	Genesis HealthCare
Merck Co	Nike Inc	Chesapeake Energy	LaBranche Co	Atlas Air Worldwide
Motorola Solutions	AFLAC Inc	BancFirst	BlackRock Inc	

Table C.1 reports the list of corporations that are included in the analysis to examine the impact of campaign contributions on financial returns.

To examine the impact of campaign contributions on corporation returns, the following specification is used :

$$cumtret_{i(t+2)} = \beta_1(contributions)_{it} + FEs + \epsilon_{it}$$
(4.1)

where i indexes corporations; t indexes time, and represents the election cycle that contributions are made. cumtret are the cumulative returns of corporations which is a compounded return from the last day of the previous Congress for each election cycle. contributions, are the aggregated contributions that are made by a corporation. market cap, are the share price multiplied by the number of outstanding shares of each corporation. FEs are time, firm, and industry level fixed effects; market  $\epsilon_{it}$  is the error term while  $\beta_1$  is the key parameter. Instead of using cumulative return that is compounded from a fixed point (December, 29, 2000), further analysis is conducted by using cumulative return that is compounded from the last day of the previous Congress for each election cycle in which corporations contributed to an electoral campaign.

Table C.1 presents the estimation results for the above specification for aggregate contributions - regardless of the recipient, with Panel A displaying the results with election, firm and industry level fixed effects. Panel B presents the results with an additional control variable, market capitalization, along with the same fixed effects. In Panel A, Column (1) examines the impact of contributions made to representatives who win the election on cumulative corporation returns over the following two years while the representatives are in congress, with election fixed effects included in the model. Column (2) extends the analysis by incorporating firm fixed effects in addition to the specification in Column (1), while Column (3) includes industry fixed effects in addition to Column (1).

The findings in both panels do not indicate any statistically significant results. On the other hand, although the estimated coefficients for contributions are insignificant, their signs are negative.

Table C.2 presents the same specification as of Table C.1 Panel B for different subsets depending on whether the corporations donate solely to one party. While first two panels show corporations that made contributions solely to either Democrat or Republican representatives, the last panel shows estimation results for corporations that contributed to both parties' representatives.

The sign of the coefficient estimate for contributions are negative in all panels, when firm level fixed effects are used. However, as in Table C.1 none of them are statistically

Table C.2: Baseline Estimations

	(1)	(2)	(3)
	Cum. Returns	Cum. Returns	Cum. Returns
Panel A			
contributions	-0.0190	-0.0286	-0.0267
	(-0.66)	(-0.58)	(-0.81)
			_
N	1520	1520	1512
Panel B			
	0.0400		0.010
contributions	-0.0108	-0.0376	-0.0165
	(-0.36)	(-0.75)	(-0.49)
market cap.	-0.000370	-0.00110	-0.000576
marmer cap.	(-1.34)	(-1.48)	(-1.58)
	(1.01)	(1.10)	(1.00)
Election FE	Yes	Yes	Yes
Firm FE	100	Yes	200
Industry FE		200	Yes
$\frac{N}{N}$	1503	1503	1495
N	1503	1503	1495

t statistics in parentheses

Notes: Each column reports estimates of Equation (B.1), in which the dependent variables are the cumulative returns of corporations in time t+2. Contributions are in hundred thousand Dollars, where market capitalization are in billion dollars. Column (1), (2), (3) present results with only election fixed effects, election and firm fixed effects, and election and industry fixed effects respectively.

significant for the subset that accounts for corporations contributed to solely Democrats in Panel A. Contributions that are made solely to Democrats and Republicans (in a certain election cycle) can be considered as contributions that are ideologically motivated. Arguably these motivations are separate from profit-motivated contributions. Thus ideologically motivated campaign contributions to Democrats has no significant impact on corporation returns and the sign of the coefficient estimate for contributions is negative. On the other hand, Panel B of Table C.1 considers contributions to solely Republicans. Contributions to solely Republicans exhibit a significant negative relationship at 90%

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Table C.3: Contributions to Different Groups with Market Capitalization

	(1)	(2)	(3)
	Cum. $Returns(t+2)$	Cum. $Returns(t+2)$	Cum. $Returns(t+2)$
Panel A (to solely Democrats)			
contributions	-0.263	-0.134	-0.316
	(-1.56)	(-0.47)	(-1.66)
market cap.	0.000780	-0.00185	-0.000609
-	(1.46)	(-1.34)	(-0.71)
N	274	274	274
Panel B (to solely Republicans)			
contributions	-0.212*	-0.241	-0.165
	(-2.16)	(-1.69)	(-1.56)
market cap.	-0.000818*	-0.00483***	-0.000468
	(-2.29)	(-3.33)	(-1.08)
N	620	620	617
Panel C (to Both)			
contributions	-0.0127	-0.0250	-0.0194
	(-0.27)	(-0.30)	(-0.35)
market cap.	-0.000402	-0.000392	-0.00113
	(-0.80)	(-0.30)	(-1.49)
N	609	609	604
Election FE	Yes	Yes	Yes
Firm FE		Yes	
Industry FE			Yes

t statistics in parentheses

Notes: Each column reports estimates of Equation (B.1), in which the dependent variables are the cumulative returns of corporations in time t+2. Column (1), (2), (3) present results with only election fixed effects, election and firm fixed effects, and election and industry fixed effects respectively. Contributions are in hundred thousand US dollars and market capitalization are in billion US dollars. Panel A, B, C present corporations that contributed to solely Democrat, to solely Republican and to both parties representatives, respectively.

level with corporation returns when it is accounted for firm-level fixed effects in the specification as shown in Column (2) of second panel. When firm-level fixed effects are incorporated, it is estimated that a \$100,000 increase in contributions is associated with a -24.1% decrease in the cumulative returns of corporations that exclusively contributed to Republican representatives. In Column (3) the estimated impact of contributions on corporation returns are not significant suggesting that results in Column (2) are not driven by industry specific differences. Hence the decrease in corporation returns are independent from industrial trends and/or shocks. As a result if contributing to solely one political party is considered as a sign of contributing ideologically, ideologically motivated campaign contributions to Republicans and Democrats are negatively correlated

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Table C.4: Contributions to Different Groups without Lagged Returns

	(1)	(2)	(3)
	Cum. Returns $(t+2)$	Cum. Returns $(t+2)$	Cum. Returns $(t+2)$
Panel A (to solely Democrats)			
contributions	1.256	0.365	1.107
	(0.54)	(0.18)	(0.46)
market cap.	0.0110	0.0344***	0.0210*
	(1.48)	(4.41)	(2.01)
$\overline{N}$	279	279	279
R-sq	0.131	0.895	0.450
Panel B (to solely Republicans)			
contributions	0.123	-1.868*	-0.373
	(0.12)	(-2.01)	(-0.40)
market cap.	-0.00411	0.0106	-0.000562
	(-1.13)	(1.12)	(-0.15)
N	625	625	622
R-sq	0.182	0.761	0.425
Panel C (to Both)			
contributions	0.0230	0.838**	0.509
	(0.07)	(2.88)	(1.56)
market cap.	-0.00654	0.00903*	0.00248
	(-1.86)	(1.98)	(0.56)
$\overline{N}$	609	609	604
R-sq	0.144	0.860	0.461
Election FE	Yes	Yes	Yes
Firm FE		Yes	
Industry FE			Yes

t statistics in parentheses

Notes: Each column reports estimates of Equation (3.1), in which the dependent variables are the cumulative returns of corporations in time t+2. Column (1), (2), (3) present results with only election fixed effects, election and firm fixed effects, and election and industry fixed effects respectively. Contributions are in hundred thousand US dollars and market capitalization are in billion US dollars. Panel A, B, C present corporations that contributed to solely Democrat, to solely Republican and to both parties representatives, respectively.

with corporation returns. However, this negative correlation is only statistically significant (at 90% level) for Republicans, while it is not significant for Democrats. Thus, contributing ideologically has no benefits for corporations and if there is any impact it decreases the returns of corporations in the following two years when the representatives are in congress.

In line with the main analysis estimation results for contributions that are made to both political party are not statistically significant. Contributing to both political parties (rivals) can be considered as strategic contribution as clearly it is not ideologically motivated. Results on contributions for corporations that contributed to both political are

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Table C.5: Contributions to Different Groups with Alternative Lag

	(1)	(2)	(3)
	Cum. $Returns(t+2)$	Cum. $Returns(t+2)$	Cum. $Returns(t+2)$
Panel A (to solely Democrats)			
cum. $returns(t+1)$	1.151***	1.063***	1.174***
	(57.99)	(16.59)	(46.38)
contributions	-0.422	-1.205	-0.199
	(-0.67)	(-1.05)	(-0.27)
market cap.	0.00836***	0.0160***	0.00673*
	(4.16)	(3.46)	(2.13)
N	279	279	279
R-sq	0.936	0.965	0.950
Panel B (to solely Republicans)			
cum. returns(t+1)	1.007***	0.925***	0.986***
, ,	(72.96)	(37.42)	(61.65)
contributions	-0.352	-0.863	-0.397
	(-1.10)	(-1.92)	(-1.17)
market cap.	-0.00112	-0.00667	0.000111
	(-0.95)	(-1.46)	(0.08)
N	625	625	622
R-sq	0.915	0.944	0.925
Panel C (to Both)			
cum. $returns(t+1)$	0.950***	0.840***	0.925***
	(73.39)	(29.92)	(60.89)
contributions	-0.0312	0.0403	0.00309
	(-0.30)	(0.24)	(0.03)
market cap.	0.000655	0.00140	0.00181
	(0.59)	(0.55)	(1.15)
N	609	609	604
R-sq	0.914	0.956	0.931
Election FE	Yes	Yes	Yes
Firm FE Industry FE		Yes	Yes

t statistics in parentheses

Notes: Each column reports estimates of Equation (3.1), in which the dependent variables are the cumulative returns of corporations in time t+2. Column (1), (2), (3) present results with only election fixed effects, election and firm fixed effects, and election and industry fixed effects respectively. Contributions are in hundred thousand US dollars and market capitalization are in billion US dollars. Panel A, B, C present corporations that contributed to solely Democrat, to solely Republican and to both parties representatives, respectively.

not significant, however the sign of the coefficient estimate for contributions is negative.

Table C.4 presents the estimation results of Equation (1) without incorporating lagged returns. According to Panel C, Column (2) of Table C.4, contributions to both political parties are estimated to be positively correlated with cumulative returns. This suggests

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Table C.6: Contributions to Different Groups (Heavily Regulated Sectors)

	(1)	(2)	(3)
	Cum. $Returns(t+2)$	Cum. $Returns(t+2)$	Cum. $Returns(t+2)$
Panel A (to solely Democrats)			
cum. returns(t)	1.385***	1.120***	1.424***
.,	(45.81)	(10.77)	(36.72)
contributions	-0.369	-2.069	-0.901
	(-0.38)	(-1.30)	(-0.83)
market cap.	0.00369	0.00693	0.00256
	(1.11)	(0.87)	(0.53)
N	200	200	200
R-sq	0.928	0.962	0.938
Panel B (to solely Republicans)			
cum. returns(t)	1.212***	1.039***	1.179***
.,	(49.17)	(23.41)	(41.91)
contributions	-1.083*	-1.845**	-1.078*
	(-2.24)	(-2.61)	(-2.14)
market cap.	-0.00179	-0.0119	-0.000331
	(-1.07)	(-1.75)	(-0.17)
N	485	485	482
R-sq	0.867	0.910	0.885
Panel C (to Both)			
cum. returns(t)	1.159***	0.735***	1.092***
	(49.70)	(14.15)	(39.37)
contributions	0.0957	0.403	0.174
	(0.66)	(1.60)	(1.06)
market cap.	-0.00132	0.000529	-0.000733
	(-0.76)	(0.11)	(-0.31)
N	507	507	502
R-sq	0.860	0.908	0.874
Election FE	Yes	Yes	Yes
Firm FE Industry FE		Yes	Yes
III. COULT I I			100

t statistics in parentheses

Notes: Each column reports estimates of Equation (3.1), in which the dependent variables are the cumulative returns of corporations in time t+2. Column (1), (2), (3) present results with only election fixed effects, election and firm fixed effects, and election and industry fixed effects respectively. Contributions are in hundred thousand US dollars and market capitalization are in billion US dollars. Panel A, B, C present corporations that contributed to solely Democrat, to solely Republican and to both parties representatives, respectively.

that contributions can be considered as investments for corporations. However, it is important to note that this specification, which excludes lagged returns, does not account for firm performance prior to making the contributions. This omission potentially weakens the findings.

<sup>\*</sup> p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

An alternative to the main specification could involve a different lag structure, specifically (t+1). Table C.5 presents the estimation results of Equation (1) using this (t+1) lag structure. The findings of Table C.5 align with those in Table 3.5. The primary difference observed is that in Panels B and C of Table C.5, the significance levels of contributions decrease, and contributions made solely to Democrats exhibit a negative coefficient.

Finally, Table C.6 presents a heterogeneity analysis by focusing on sectors that are more heavily regulated. The findings are in line with the main analysis, though there are slight changes observed in Column 2 of Panels B and C. Notably, the magnitude of the estimated impact of contributions made solely to Republicans, as well as to both parties, increased. On the other hand, while the significance level of contributions to both parties also saw a slight increase, it remained insignificant, consistent with the main analysis. While the regulatory intensity of a sector might potentially amplify the effects, this hypothesis remains unchanged according to the findings presented in Table C.6.

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