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Edward James Fagan

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Information Wars: Party Elites, Think Tanks and Polarization in Congress

Committee:

Bryan D. Jones, Supervisor

Derek Epp

Sean Theriault

Christopher Wlezien

Christina Wolbrecht

**Information Wars: Party Elites, Think Tanks and Polarization in
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by

Edward James Fagan

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Abstract

Information Wars: Party Elites, Think Tanks and Polarization in Congress

Edward James Fagan

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Supervisor: Bryan D. Jones

For much of modern history, U.S. political parties adopted a consensus non-partisan knowledge regime, consisting of experts at universities, non-partisan think tanks and government agencies, to inform policymaking decisions. However, after the consensus supported by the knowledge regime enabled the expansion of the scope of federal government domestic policy during the 1950s-1970s period, ideological conservatives rejected the non-partisan regime and created their own alternative knowledge regime centered around a small number of party-aligned think tanks. Democrats followed a few decades later to create their own alternative knowledge regime. These think tanks fill a privileged role advising political parties that is reserved for formal party organizations in most democracies. I argue that they use a variety of strategies, including issue redefinition, activating latent preferences and elite persuasion, to move their party's positions away from the center and toward the left or right. They published biased policy analysis that often makes claims which conflict with claims made by non-partisan policy analysis. As they become larger and more influential across time or between issues, party-aligned think tanks increase polarization in Congress.

Table of Contents

List of Tables	x
List of Figures	xii
Chapter 1: Introduction.....	1
Plan for the Book.....	9
Chapter 2: Knowledge Regimes, Think Tanks and U.S. Political Parties	16
History of think tanks, political parties and knowledge regimes in the U.S.	19
Technocratic era (1920s-1970s)	19
Conservative reaction (1970s-1990s).....	23
Progressive counter-reaction (2000s-present)	34
U.S. think tanks as party-like organizations	39
Research design	42
Definitions	43
Case Selection	47
Summary	52
Chapter 3: Theory of Information and Political Parties	54
Theories of U.S. party position-taking	56
Office-seeking and coalitional theories of political parties	56
Extended political network theory and policy-seeking political parties	61
My theory of party positions.	64
Information theory and Congress	64
My theory of information and preferences	69

Party-aligned think tanks strategies.....	74
Summary	77
Chapter 4: Comparative Policy Analysis	79
Party-Aligned Think Tanks and Biased Policy Analysis	80
Bias	80
Framing.....	85
Research design.....	86
Comparative policy analysis case studies	91
American Clean Energy and Security Act of 2009	91
Affordable Care and Patient Protection Act of 2010.....	95
Clean Energy Portfolio Standards	100
Border Security, Economic Opportunity and Immigration Modernization Act of 2013	105
Tax Cuts and Jobs Act of 2017.....	113
Summary	118
Chapter 5: Polarization and Party-Aligned Think Tanks Over Time.....	122
Research on polarization	125
Elites at Party-Aligned Think Tanks and Polarization	131
Results	134
Party-Aligned Think Tanks and Polarization in Congress	134
Party-Aligned Think Tanks and Cuts to Congressional Capacity.....	143
Summary	149
Chapter 6: Measuring Polarization Across Issues	151
Measuring Polarization Across Issues.....	152

Summary	167
Chapter 7: Polarization and Party-Aligned Think Tanks Across Issues	170
Measuring party-aligned think tank activity across issues	172
White Papers.....	175
Congressional record citations	180
Lobbying disclosure reports	183
Hearing witnesses.....	185
Party-aligned think tank issue attention and polarization	188
Bivariate Cross-Sectional Models	188
Multivariate Testing for Omitted Variables	194
Panel Models	197
Summary	201
Chapter 8: Democracy During the Information Wars	204
Asymmetric Information Wars.....	208
Appendix	212
References	213

List of Tables

Table 2.1: Average Revenue of Party-Aligned Think Tank Cases, 2001-2016	48
Table 4.1: Impact Analyses Used in this Chapter.....	91
Table 4.2: Analyses of the Effect of the American Clean Energy and Security Act on GDP in 2030	95
Table 4.3: Analyses of the Effect of the Affordable Care and Patient Protection Act on the Deficit	100
Table 4.4: Analyses of the Impact of Proposed Renewable Energy Portfolio Standards on Electricity Prices	104
Table 4.5: Analyses of the Impact of the Tax Cuts and Jobs Act on Real GDP in 2027	118
Table 6.1: Correlations Between Party Disagreement Scores, Voice-Vote Adjusted Party Disagreement Scores, and DW-NOMINATE Difference of Means, 1973-2018.....	159
Table 6.2: Intra-Topic Correlation Between Voice-Vote Adjusted and Unadjusted Party Disagreement Scores, 1947-2018	164
Table 6.3: Change in Voice Vote-Adjusted Party Disagreement Over time by Issue, 1973-2018.....	167
Table 7.1: Comparative Agendas Project Major Topics and Think Tank Examples ..	174
Table 7.2: Correlations Between Relative Think Tank Attention Across Outputs	193
Table 7.3: Issue Ownership Values by Comparative Agendas Project Major Policy Topic Area (Fagan 2019).....	196
Table 7.4: OLS Estimation of Polarization Across Issues, Testing for Issue Ownership and Salience as Confounding Variables	197

Table 7.5: Time Series Cross Sectional Estimates of Δ Party Disagreement (t).....	201
Table A.1: Heritage Foundation Revenue Data Sources	212

List of Figures

Figure 1.1. Party-Aligned Think Tank White Papers on Climate Change, 2004-2016.....	5
Figure 2.1 Trump Political Appointees from Select Organizations	50
Figure 3.1: Cuts to Congressional Capacity	67
Figure 5.1: DW-NOMINATE Difference of Means (Average of Both Chambers), 1973-2016.....	136
Figure 5.2: Polarization and Heritage Foundation Revenue	138
Figure 5.3: Polarization and Heritage Foundation Revenue, Detrended	139
Figure 5.4: Polarization and Party-Aligned Think Tank Witnesses	141
Figure 5.5: Polarization and Party-Aligned Think Tank Witnesses, Detrended.....	141
Figure 5.6: Party-Aligned Think Tank Newspaper Citations and Polarization	143
Figure 5.7: Party-Aligned Think Tank Witnesses Per Hearing and CBO, CRS and OTA Staff, 1973-2016.....	144
Figure 5.8: Party-Aligned Witnesses Per Hearing and Committee Staff, 1973-2016 ..	145
Figure 5.9: Party-Aligned Think Tank Witnesses Per Hearing and Selected Non- Partisan Witnesses Per Hearing.....	148
Figure 6.1: Laws Passed without Roll Call Votes in the House and Senate, 1947- 2018	157
Figure 6.2: Comparison between party disagreement scores, voice-vote adjusted scores, and DW-NOMINATE, 1973-2018.....	158
Figure 6.3: Distribution of Party Disagreement of Roll Calls, House of Representatives.....	160
Figure 6.4: Distribution of Party Disagreement of Roll Call and Voice Votes, House of Representatives	160

Figure 6.5: Total Laws Passed by Voice Vote and Total Roll Call Votes in Congress, 1947-2018	162
Figure 6.6: Comparison between voice vote-adjusted party disagreement scores and unadjusted party disagreement scores, 1947-2018.....	163
Figure 6.7: Mean Annual Voice Vote-Adjusted Party Disagreement Score by Policy Topic, 1947-2018	165
Figure 6.8: Change in Voice Vote-Adjusted Party Disagreement Over Time by Issue, 1973-2018.....	166
Figure 7.1: White Paper Data Collection Example	176
Figure 7.2: Distribution of White Paper Policy Attention	179
Figure 7.3: Distribution of White Paper Policy Attention Relative to CRS Reports....	179
Figure 7.4: Distribution of Party-Aligned Think Tank Citation Policy Attention.....	182
Figure 7.5: Distribution of Citation Policy Attention Relative to Hearings	182
Figure 7.6: Distribution of Attention to Policy in Bills Named in Lobbying Disclosures	184
Figure 7.7: Attention to Policy in Bills Disclosed in Lobbying Disclosures Relative to All Bills	185
Figure 7.8: Distribution of Testimony Attention to Policy	187
Figure 7.9: Distribution of Relative Testimony Policy Attention Relative to Hearings.....	187
Figure 7.10: Relative White Paper Policy Attention and Polarization	189
Figure 7.11: Congressional Record Citations and Polarization Across Issues	190
Figure 7.12: Lobbying Disclosure Reports and Polarization.....	191
Figure 7.13. Witness Testimony and Polarization.....	192
Figure 7.14: Average of Four Outputs and Polarization	193

Chapter 1: Introduction

The 2008 Republican Party Platform contained a plank titled, “Addressing Climate Change Responsibly.” The section laid out the party’s position on climate issues:

“The same human economic activity that has brought freedom and opportunity to billions has also increased the amount of carbon in the atmosphere. While the scope and longterm consequences of this are the subject of ongoing scientific research, common sense dictates that the United States should take measured and reasonable steps today to reduce any impact on the environment. Those steps, if consistent with our global competitiveness will also be good for our national security, our energy independence, and our economy. Any policies should be global in nature, based on sound science and technology, and should not harm the economy.”¹

The platform proposed to solve the climate change problem by supporting a prize system for technological innovations to reduce carbon emissions, a “market-based” system to decrease emissions and increase energy efficiency and a diplomatic effort to encourage India and China to join in reducing greenhouse gas emissions. While the Republican Party Platform opposed command-and-control environmental regulation, their positions were similar to those expressed in the Democratic Party’s platform. Consistent with their historical prioritization of environmental policy (Egan 2013; Fagan 2019), Democrats signaled that climate change was a more urgent priority than Republicans,

“We will lead to defeat the epochal, man-made threat to the planet: climate change. Without dramatic changes, rising sea levels will flood coastal regions around the world. Warmer temperatures and declining rainfall will reduce crop yields, increasing conflict, famine, disease, and poverty. By 2050, famine could

¹ 2008 Republican Party Platform. Available online at the American Presidency Project, <https://www.presidency.ucsb.edu/documents/2008-republican-party-platform>. Accessed 4/22/2020.

displace more than 250 million people worldwide. That means increased instability in some of the most volatile parts of the world.”²

However, they took very similar positions as the Republican Party to solve the problem. Their platform proposed that the federal government invest in clean energy technology, create a market-based cap and trade system to price carbon and generate revenue and work to enforce international restrictions on climate pollution with India, China, Russia and the European Union.

While the two parties disagreed over some of the details about how to solve the climate change problem, their positions were close enough to find common ground. Indeed, a few weeks before the party conventions, the Bush Administration released a plan titled, “Energy Security for the 21st Century,”

“President Bush has taken a reasoned, balanced approach to the serious challenges of energy security and climate change. The President supports a climate change policy that takes advantage of new clean energy technologies; increases our use of alternative fuels; works towards an international agreement that will slow, stop, and eventually reverse the growth of greenhouse gases; and includes binding commitments from all major economies.”³

In Congress, Senators John McCain and Joe Lieberman introduced the Climate Stewardship and Innovation Act of 2007 with four Republican and seven Democratic co-sponsors, including Barack Obama and Hillary Clinton. The bill would have established a cap and trade system to reduce U.S. greenhouse gas emissions using a market mechanism while investing in clean energy technology. While the parties had polarized on

² 2008 Democratic Party Platform. Available online at the American Presidency Project, <https://www.presidency.ucsb.edu/documents/2008-democratic-party-platform>. Accessed 4/22/2020.

³ “Energy for America’s Future.” <https://georgewbush-whitehouse.archives.gov/infocus/energy/>

environmental policy issues during the previous two decades as extractive industries became more central to the Republican Party and environmental groups became more central to the Democratic Party (Karol 2009), party leaders in Congress, both party's nominees in the 2008 Presidential contest and the sitting President were all well on their way toward passing a significant policy change in response to a widely-recognized problem. Republican elites who expressed support for action on climate change included future climate deniers such as governors Sarah Palin and Mitt Romney (Peach 2011) and Donald Trump (Cama 2016).

Four years later, the party positions on climate change shifted dramatically. The Democratic Party still supported legislation to address climate change, but Republican support evaporated. The 2012 Republican Party platform opposed cap and trade systems, federal subsidies for technological innovation and scientific inquiry and regulatory actions to reduce climate change. No Republican Senator supported the Climate Stewardship Act's successor, the American Clean Energy Security Act of 2009. No major Republican candidate for the presidency was willing to publicly acknowledge that the earth was warming (Peach 2011). The parties are farther apart on climate change than at any point since the issue emerged in the late 20th century with little short-term hope for consensus.

What could have caused such a rapid and decisive shift in the policy positions of a major American political party? The Republican Party coalition has a long-term association with the extractive industries, which opposed efforts to limit greenhouse gas emissions. Beginning in the late 1980s, the close connections between the Bush family,

and Texas Republicans more broadly, and the extractive industries caused large environmental groups to sort into the Democratic Party (Karol 2019). However, these coalitions were firmly in place by the late-2000s, so they could not have caused the change. Given that the problem, climate change, and proposed solutions, a market mechanism to price carbon coupled with public investment in clean energy technology, did not change, it could not have been caused by ideology objections to the policy change. In fact, cap and trade policy designs were originally brought to the United States by the George H.W. Bush Administration to combat acid rain as a conservative alternative to progressive command and control designs (Voß 2007). Finally, there is little evidence that the Republican Party changed their position in response to public opinion, as the public began to oppose action on climate change only after elites (Merkley and Stecula 2018; Tesler 2018).

The change which caused Republicans to rapidly shift their positions on climate change was introduction of widespread climate denial among elites of the party. Republican elites questioned the science underlying climate change before the late-2000s (Boykoff and Boykoff 2004; McCright and Dunlap 2003). However, something changed during the second term of the Bush presidency. Well-organized climate skeptics published a flood of research denying the scientific consensus on climate change (Oreskes and Conway 2011). Numerous studies show that Republican-aligned think tanks were central to this campaign (Albert 2019; Brulle 2014; Dunlap and Jacques 2013; Fisher, Waggle, and Leifeld 2013; Jacques, Dunlap, and Freeman 2008; Neubauer 2011; Stokes 2020). They published books, aggressively appeared in the media, testified before

Congress, and privately advised members of the broader conservative movement on the issue. Figure 1.1 shows this mobilization. The Heritage Foundation, the most important information producer on climate change in the Republican extended party network (Albert 2019), surged their production of white papers on climate change from 2007 to 2009.⁴ Their counterparts in the center-right American Enterprise Institute, center-left Center on Budget and Policy Priorities and progressive Center for American Progress did not countermobilize to match the surge from climate denying organizations. The climate denial campaign was enormously successful. Republican elites began to deny climate change, and quickly transferred those behaviors to rank-and-file party members (Guber 2013; Hamilton 2011; McCright and Dunlap 2011).

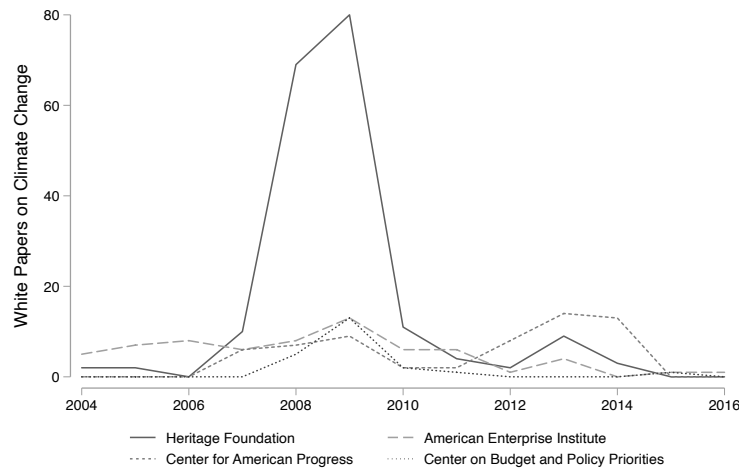


Figure 1.1. Party-Aligned Think Tank White Papers on Climate Change, 2004-2016

⁴ These data are drawn from all white papers on think tank websites. They are coded for policy content using the Policy Agendas Project major topic coding scheme. For more details, see Chapter 6.

Before the organized campaign to encourage climate denial, the politics of climate change consisted of party disagreements over issue prioritization, ideology and how the party coalitions will bear the costs and benefits of policy change. When it became clear in the mid-2000s that the United States would have to deal with an existential threat in the form of climate change, the problem forced both parties to attend to a long-ignored issue. The normal problem-solving processes that direct most agenda setting in democracies (Jones and Baumgartner 2005) caused even reluctant Republican elected officials to decide that the federal government needed to change public policy and address climate change. Because both parties agreed that climate change was a serious problem, it was caused by greenhouse gas emissions, and a set of policy solutions could address the problem, a bipartisan consensus emerged around a cap and trade system coupled with international cooperation and clean energy subsidies. The parties disagreed on some aspects of the policy, but those disagreements were reconcilable. After the organized campaign, a different kind of disagreement emerged. Republicans and Democrats now disagreed on the basic facts of the issue. Republicans did not believe that climate change was a serious threat to the United States and that public policy to address it would be prohibitively costly. Under these conditions, no compromise between the parties was possible. No climate legislation has made serious progress in the U.S. Congress since.

Political parties are supposed to disagree on policy. Modern U.S. political parties hold distinct and strong ideological beliefs about the role of government, culture, race and class in society (Noel 2014). They represent constituencies with different interests, resulting in disagreement over who should bear the costs and receive the benefits of

policy (Karol 2009; Wolbrecht 2000). At any given time, parties may also disagree strategically in furtherance of electoral competition (Lee 2009). These disagreements produce powerful differences over policy on a range of issues, from opinions of abortion rights to preferences for free trade deals. They are a component of a functioning democracy, assuring that parties hold each other accountable and take positions that allow voters to choose between viable policy alternatives to solve society's problems.

However, parties increasingly polarize on another dimension: a basic understanding of the facts underlying policy debates, or the relationship between the outputs of government and policy outcomes. As Congress has polarized, party disagreement on facts has extended across numerous issues. Republicans and Democrats disagree on the underlying facts of highly salient issues, such as the impact of greenhouse gas emissions on the climate (Dunlap and Jacques 2013), the relationship between tax cuts and deficits (Jones and Williams 2008) and the relationship between intelligence and race (Devlin 1997). They also disagree on the underlying facts of less salient issues, such as the impact of urban planning strategies on traffic (for example, see DeGood 2019; Moore 2020) or the impact on net neutrality on competition among technology companies (for example, see Gattuso 2017). These disagreements strongly influence the positions that they take; if a policymaker believes that a policy has a great benefit or harm, they will support or oppose it.

Party disagreements on objective reality are destructive to policymaking in a representative democracy. Elites, parties and voters seek to influence policy outcomes through public policy outputs. These goals are often shared, such as solving the most

pressing problems facing the country at any given time (Adler and Wilkerson 2013; Jones and Baumgartner 2005). When political parties agree on facts, these shared goals help to build a productive consensus. The parties may bargain over who bears the tradeoffs of some solution to a problem or have ideological disagreements on how to structure the mechanisms, but overall, they can reach agreement on some solutions to the problem. However, if they disagree over the facts, they will struggle to reach consensus. Parties which disagree on facts will disagree about whether or not a policy output solves the problem, its costs, or how those costs and benefits are distributed. When these new disagreements are layered on top of existing disagreements over the proper role of government, morality, and constituency interests, they pour gasoline on the fires of polarization. Both parties believe that their preferred policy alternatives are best to solve the country's most pressing problems, and the other party's alternatives will not. The result of these good-faith disagreements is paralysis and gridlock.

We have a strong intuitive and scientific understanding that interested parties will believe facts that support their prejudices. When people are confronted with information, confirmation biases powerfully affect their understanding of that information (Mynatt, Doherty, and Tweney 1977; Nickerson 1998). Motivated reasoning causes people to both seek out and frame information in a manner that supports their interests (Kunda 1990; Slothuus and de Vreese 2010) (Kunda 1990; Slothuus and de Vreese 2010). Elite policymakers and policymaking organizations are just as subject to cognitive biases as normal people (Jones 2001; Shannon, McGee, and Jones 2019). Indeed, much of the public's attitudes toward salient issues are created by public cue-taking from elite opinion

(Druckman and McGrath 2019; Druckman, Peterson, and Slothuus 2013; Tesler 2018).

Heuristics are common in all types of human psychology and decision-making, and we should expect those heuristics to impact the factual understanding of political parties.

However, partisan beliefs that lead to cognitive biases are not self-generating. Rather, they are the product of long-term interactions with knowledge regimes, or the organizations and practices that generate information about public policy outputs and outcomes (Campbell and Pedersen 2014). Historically, the parties achieved a degree of consensus over which organizations and institutions could be trusted to provide important objective information on public policy. However, that consensus broke down beginning in the 1970s when conservative Republicans created their own alternative knowledge regime to offer different conclusions from the scientific consensus. This knowledge regime was centered around a small number of highly influential party-aligned think tanks. These organizations promoted heterodox policy analysis supporting conservative public policy. While progressive Democrats did not immediately respond by forming their own think tanks, they eventually created their own alternative knowledge regime in the 2000s. Thus, the partisan disagreements over the underlying objective reality of public policy debates were created by organized politics, not just their natural psychological pathologies

PLAN FOR THE BOOK

This dissertation examines the causes and consequences of party disagreement on the basic facts of policy change using a mix of qualitative historical analysis, case studies

of partisan policy analysis and quantitative analysis. It is divided into two broad sections. In the first section, I examine the historical and theoretical causes of partisan knowledge regimes. In the second section, I use polarization in Congress to test their influence over time and across issues.

The dissertation begins in Chapter 2, “Knowledge Regimes, Political Parties and Think Tanks,” which examines the adoption of separate knowledge regimes by the Republican and Democratic parties. The chapter argues that conservative Republican elites reacted to cooperation between the two political parties and non-partisan experts during the Great Broadening period of the 1950s-1970s (Jones, Theriault, and Whyman 2019). They observed that this cooperation tended to lead to policy alternatives involving an increased federal role in domestic policy on a wide range of issues. As a result, they grew deeply distrustful of the non-partisan knowledge regime and sought to replace it with a more conservative alternative knowledge regime. They successfully redefined non-partisan and technocratic experts in universities, government agencies, the media, and think tanks as liberal, and therefore equally legitimate in policy debates as conservatives. Conservative Republicans built their alternative policy regime largely around a network of think tanks, such as the Heritage Foundation and American Enterprise Institute. These conservative think tanks adopted aggressive marketing tactics to persuade their fellow Republicans to adopt more conservative policy preferences. They were quickly integrated into the Republican Party, developing and supporting many of the conservative policy proposals and staffing the executive branch during Republican presidencies.

However, the Democratic Party did not immediately respond by creating its own network of progressive think tanks. For nearly three decades, Democrats were content to rely on the non-partisan technocratic institutions that they had relied on during the 1950s-1970s. However, after losing many key policy battles to the right, progressive Democrats established and resourced their own powerful think tanks, beginning with the Center for American Progress. While these think tanks retained some of the party's technocratic ethos relative to the Republican-aligned think tanks, they successfully helped move the party to the left, further increasing polarization.

I conclude Chapter 2 by arguing that we should study the role of party-aligned think tanks in modern party and Congressional politics. I define the terms "party-aligned" and "think tank," and use these definitions to select cases to study. I then select the four largest party-aligned think tanks by average revenue from 2001-2016. These are the Heritage Foundation and American Enterprise Institute on the Republican side and the Center for American Progress and Center on Budget and Policy Priorities on the Democratic side.

Chapter 3, "A theory of political party preferences and information," proposes a theory of party position change through policy analysis. I begin by reviewing the literature on party position-taking in the United States. I then propose my own theory of policy preferences, where preferences for policy outputs are a function of three factors: ideology, incentives and policy analysis. Ideology refers to a member's preferences for policy outcomes *ceteris paribus*. Political, career or personal incentives can change or reinforce these preferences. Policy analysis can change the policymaker's beliefs about

the relationship between policy outputs and outcomes, thus changing their preferences for policy outputs while their preferences for outcomes remains constant. The chapter then discusses how policy analysis might be used to change preferences. It argues that members of the extended political party (Kathleen Bawn et al. 2012) are best positioned to persuade policymakers through policy analysis due to their ability to exploit cognitive biases. It proposes that party actors can influence their party preferences using three mechanisms: elite persuasion, framing and activating latent preferences. Finally, it proposes several hypotheses regarding the activities of party-aligned think tanks, the information they produce, and their impact on polarization.

Chapter 4, “Comparative policy analysis” explores the differences in predictions made by impact analyses across five cases by party-aligned think tanks and non-partisan information sources. By examining comparable predictions of the impact of a policy output on some outcome, I measure bias in party-aligned think tanks reports as compared to non-partisan policy analysis. The five cases are: reports on the impact of the American Clean Energy and Security Act’s cap-and-trade system on GDP, reports on the impact of the Affordable Care and Patient Protection Act of 2010 on the deficit, reports on the impact of renewable or clean energy portfolio standards on electricity prices, reports on the impact of legalizing 11 million undocumented immigrants on economic growth and deficit and the impact of the Tax Cuts and Jobs Act of 2017 on economic growth and the deficit. I find that some party-aligned think tanks tend to produce estimates to the left or right of non-partisan information sources. However, there is considerable variation between think tanks, with the Heritage Foundation and Center for American Progress

producing considerably more biased information than their most centrist counterparts in the American Enterprise Institute and Center on Budget and Policy Priorities, who tended to reframe issues rather than produce biased information. I conclude that exposure to party-aligned think tank information should shift co-partisan policy preferences away from the center and toward the extremes.

Chapter 5, “Polarization and Party-Aligned Think Tanks,” examines the relationship between polarization and party-aligned think tanks over time. While the party positioning and polarization literatures are often poorly connected, they both seek to explain similar phenomena. As parties take positions further apart from their rivals, and their members express those positions with roll call votes, polarization increases. We can thus use polarization data to examine the impact of party-aligned think tanks on party position-taking.

Polarization in Congress began increasing in the late 1970s, long before polarization in the electorate. Because elites polarized first, scholars have long struggled to explain why elites changed the preferences. I argue that as party-aligned think tanks used policy analysis to persuade their co-partisans to move their preferences to the left or right, Congress will become more polarized. Using data on party-aligned think tank revenue, testimony before Congress and newspaper citations, I find a strong relationship between party-aligned think tank activities and polarization in Congress. As party-aligned think tanks become bigger, polarization increases. As Congress calls more party-aligned think tank witnesses to testify, polarization increases. In both cases, the increase in polarization is delayed slightly and independent of trends, supporting a causal

relationship. Newspaper citations also increase with polarization, but the relationship is more likely to be spurious.

Chapter 6, “Measuring Polarization Across Issues,” introduces new data to measure polarization in Congress across issues. Because polarization in Congress has monotonically increased, time series analyses of polarization in Congress like the analyses performed in Chapter 5 are prone to false positives. One solution to this problem is to measure polarization across issues, rather than over time. In order to do so, I divided Congressional outputs into 20 individual policy topics using the Policy Agendas Project (PAP), and measured polarization in each topic by calculating party disagreement scores. I improve upon prior work which also calculated party disagreement scores across topic areas (Lee 2009) by incorporating both roll call votes and non-commemorative laws passed by voice vote or unanimous consent procedures. I demonstrate the importance of including these additional laws in the party disagreement scores. Finally, I describe these new data and suggest studies beyond the scope of this dissertation where they could be used.

Chapter 7, “Polarization and Party-Aligned Think Tanks Across Issues,” I explore the relationship between party-aligned think tank activities and polarization across issues. I measure the policy content of party-aligned think tank activities across four policy outputs: think tank white papers, citations of think tank research in the Congressional Record, bills named on think tank lobbying disclosure reports and hearings where think tanks were called to testify. I measure polarization using the data introduced in Chapter 6. First, I examine the relationship cross-sectional across all four think tank outputs and 20

issues. I find a strong and robust cross-sectional relationship between the two variables. Issues that receive more attention from party-aligned think tanks relative to Congress tend to be more polarized. Next, I examine the relationship dynamically across both time and issues. Across numerous model specifications, I find strong evidence of a long-term relationship between the two variables, but little evidence of a short-term relationship. These results suggest that party-aligned think tanks are not merely flocking to policy areas when debates become partisan but are rather a structure force making issues more polarized.

Finally, Chapter 8, “Democracy during the Information Wars,” concludes the dissertation and discusses the implications of its findings. I summarize the conclusions of the dissertation. Next, I discuss its place in the literature, and its contributions to the study of party politics, Congress and the public policy process. Finally, I discuss the dissertation’s implications for American democracy, and how Congress and other institutions can promote non-partisan information instead of relying on partisan information sources.

Chapter 2: Knowledge Regimes, Think Tanks and U.S. Political Parties

Sociologists John Campbell and Ove Pedersen (2014) define a knowledge regime as, “the organizational and institutional machinery that generate data, research, policy recommendations and other ideas that influence public debate and policymaking” (3). Their work examines national policy regimes, finding variation in the processes by which ideas enter the policy process under different national knowledge regimes. However, we can also apply the concept to political parties. Political parties have organizational and institutional machinery to provide policy analysis so that they and their members can make decisions about public policy. To understand why political parties believe in different facts about public policy, we need to understand the knowledge regimes that generate those beliefs.

This chapter explores the development of the knowledge regimes underlying U.S. political parties. It is divided into two sections. In the first section, I examine the history of knowledge regimes and think tanks in U.S. politics. I divide this history into three distinct eras. In the first era, from the 1930s until the late 1970s, U.S. policymaking was largely defined by a technocratic consensus. Academics, non-partisan think tanks and bureaucrats were regarded by both parties as credible experts in their policy domains. This knowledge regime was an essential component of the expansion of the federal government, both as a source of policy analysis capacity before the expansion, and as a source of political consensus.

In the second era, from the late 1970s to the early 2000s, the collaboration between both parties and the technocratic knowledge regime prompted a reaction from conservatives, who viewed it as inherently liberal, rather than non-partisan. Technocrats, and the bipartisan consensus around their legitimacy, allowed the federal government to vastly expand the scope of its policy agenda during the knowledge regime. Conservatives observed this connection and decided that the technocratic knowledge regime prevented the Republican Party from adopting laissez-faire economic policy positions. They responded by establishing an alternative knowledge regime that featured a small number of think tanks such as the Heritage Foundation. The conservative knowledge regime grew rapidly, allowing conservative ideologues to capture the Republican Party and displace the technocratic knowledge regime as the party's primary source of policy analysis. Think tanks became deeply integrated into the Republican Party, successfully pushing their preferences to the extremes. Democrats did not immediately respond by creating their own alternative knowledge regime. They continued to rely on technocratic institutions to provide policy analysis.

In the third and final era, beginning into the 2000s and continuing to present, Democrats rapidly created their own alternative knowledge regime. Progressive democratic party actors saw their party's positions moved to the right on a variety of issues and sought a counterweight to move those positions back to the left. Led by the Center for American Progress, Democrats quickly poured resources into left-of-center think tanks. When Democrats returned to government in the late 2000s, these think tanks played the same critical role played by Republican-aligned think tanks in the late 1970s

and early 1980s. However, in contrast to their rivals, Democrats maintained a foot in the technocratic policy regime while still producing more progressive policy analysis.

From this history, I argue that some U.S. think tanks have become party-like organizations. In most democracies, parties control formally affiliated think tanks to provide policy analysis. U.S. law provides parties with no such mechanism, so privately funded think tanks occupy a similar role. However, these privately funded organizations are ultimately agents of their management and donors, rather than the party, and thus have different goals. Parties tend to be office-seeking, while interest groups are policy-seeking. Thus, U.S. pseudo-party think tanks can exploit their privileged position to change the party's positions, rather than support office-seeking goals. Finally, I argue that because not all think tanks in the U.S. function as pseudo-party organizations, careful case selection is necessary to identify and analyze their role in U.S. politics.

In the second section, I select cases to study for the remainder of this dissertation. I begin by defining the terms “think tank” and “party aligned.” I then use these definitions to select the four largest party-aligned think tanks in the United States. These are the American Enterprise Institute, Center for American Progress, Center on Budget and Policy Priorities and Heritage Foundation. I explain why I selected these cases and test their face validity.

HISTORY OF THINK TANKS, POLITICAL PARTIES AND KNOWLEDGE REGIMES IN THE U.S.

Technocratic era (1920s-1970s)

Policymaking from the beginning of the New Deal coalition in the 1930s until the beginning of the polarized era in the late 1970s was defined by a bipartisan consensus knowledge regime centered around technocracy. Backhouse (2005) describes this consensus as, “based on the premise that disinterested social scientific inquiry could contribute to better policymaking” (370). The technocratic consensus had its roots in the scientific management movement brought to American industry by Fredrick Taylor and Henry Ford (Cooke 1915; Wilsok 1973). Modern bureaucracies and civil service systems were often designed using scientific management principles (Wilsok 1973). Social science research other than economics was routinely used by legislators, bureaucrats, and courts to inform policymaking (Applebaum 2020; Erickson and Simon 1998). These practices created a system where professional experts routinely provided policy analysis, and that policy analysis was central to policy design and evaluation.

The technocratic knowledge regime was critical to the expansion of the scope of the federal government’s policy agenda between the late-1950s through late-1970s. This period, labeled “The Great Broadening” by Jones, Theriault, and Whyman (2019), saw the federal government rapidly enter many new policy areas that were previously reserved for the states or left to the free market. The federal government created dozens of new agencies and departments, including the Departments of Energy, Housing and Urban Development, Health, Education and Welfare and the Environmental Protection Agency. It began to protect the civil rights of racial minorities and women. Congress

created countless programs, such as the Interstate Highway System, Medicare, Medicaid, Pell Grants and the National Flood Insurance Program. Policy analysis from non-partisan, technocratic sources was essential to policymaking during this period (Backhouse 2005), aiding cooperation between the parties.

Both parties bought into the technocratic consensus. All of these new programs were deeply bipartisan, and many were led by Republican presidents or Congressional leadership (Grossmann 2014; Jones, Theriault, and Whyman 2019). Indeed, despite the intellectual foundation laid by conservative economists such as Frederick Hayek and Milton Friedman, Republican leaders still embraced the mainstream consensus. After taking the U.S. off the gold standard in 1971, Richard Nixon famously remarked, “I am now a Keynesian in economics,” referencing the famous quote from Milton Friedman, “We are all Keynesian now.”⁵ Indeed, his administration employed many mainstream Keynesian economists and valued their expertise (Williams 1998). The period was also historically unpolarized (Poole and Rosenthal 1984). Networks of party leaders in the legislative and executive branches worked together repeatedly to design and evaluate new federal programs and agencies (Grossmann 2014).

Non-partisan, technocratic think tanks were an essential part of the post-New Deal knowledge regime. Before the Second World War, the federal government lacked much of the policymaking capacity necessary to implement the New Deal. Non-partisan think tanks such as the Brookings Institution provided much of this capacity and were quickly

⁵ "We Are All Keynesians Now". *Time*. December 31, 1965.

integrated into the federal policymaking process (Stahl 2016). As the political parties were weak ideologues, these think tanks were able to build consensus based on their reputations for scientific rigor and policy advice unbiased by self-interest (Weaver 1989).

Think tanks created during this era were set up under two different models to encourage rigorous research. Many think tanks established during the first half of the 20th century, such as the Brookings Institution and National Bureau of Economic Research, used a “university without students” model, where researchers were hired by the organization but retained academic freedom (McGann 2016; Weidenbaum 2011). These think tanks generally employed scholars with either academic or public service backgrounds who sought to produce useful information to policymakers. After the Second World War, several large think tanks, such as the RAND Corporation and Urban Institute were established using a “contract” model, where clients, usually governments, would commission individual research projects (McGann 2016; Weaver 1989). Contract think tanks functioned as a direct extension of the federal government’s policy analysis capacity. Indeed, the RAND Corporation was established for this expressed purpose. During the Second World War, the U.S. military built up the first significant policy analysis capacity in the federal government. After the end of the war, the Air Force set up RAND to absorb much of this capacity.⁶ While RAND was initially focused on defense policy, it also provided analysis on a range of other issues. Contract think tanks tend to employ Ph.D. researchers and rigorous research standards (McGann 2016). Today, 54%

⁶ See “A Brief History of RAND.” RAND Corporation. Available online at <https://www.rand.org/about/history/a-brief-history-of-rand.html>. Accessed April 16, 2020.

of the RAND workforce holds a doctorate and about two-thirds work on defense or homeland security policy.⁷ In addition to contract work, RAND scholars have made a number of significant social scientific contributions. Most notably, RAND scholars developed early game theory to model decision-making during the Cold War (Backhouse 2005). Both models encouraged serious scientific inquiry and created organizations that were trusted as authoritative voices on public policy.

While much of the intellectual foundation for conservatism had been laid before the 1970s, it failed to oppose the dominate knowledge regime. Fredrick Hayek and other Austrian economists began to develop a critique of the Keynesian consensus in the 1930s and 1940s (Backhouse 2005). Milton Friedman developed supply-side economics and monetarism in the 1950s and 1960s, both of which were successfully integrated into mainstream economics. Ayn Rand, Robert Nozick, and other political theorists began to develop a libertarian political theory to support *laissez-faire* capitalism (Noel 2014). William F. Buckley and other conservatives published *The National Review* in 1955. As a result of these foundations, a coherent conservative ideology that resembled contemporary conservatism crystallized in the late 1950s (Noel 2014). However, while Barry Goldwater's campaign adopted much of this new ideology, it failed to catch on with most mainstream Republicans (Noel 2014). Conservative policy preferences remained on the sidelines in American policymaking. They would not force themselves into the political system on their own. Rather, they required the formation of an

⁷ "RAND at a Glance" RAND Corporation. <https://www.rand.org/about/glance.html>. Accessed 1/20/2020.

alternative knowledge system similar to the one that sustained the technocratic knowledge regime.

Conservative reaction (1970s-1990s)

The expansion of the federal government's policy agenda created a powerful reaction among ideological conservatives. Ideological conservatives opposed the expansion of the federal government into domestic policy areas such as civil rights, social welfare and environmental regulation (Jones, Theriault, and Whyman 2019). They saw the Republican Party as betraying conservatives by joining the Democratic Party in the expansion of government (Noel 2014). According to Stahl (2016), conservatives identified technocrats as fundamentally anti-conservative,

“More often than not, those who subscribed to such [technocratic] innovations were inclined to advocate for the expansion of the welfare state as an ameliorative for the downsides of corporate industrial capitalism.” (9)

Indeed, critiques of the technocratic knowledge regime were present at the very beginning of modern conservatism. Noel (2014) finds that the modern basket of policy preferences that formed into the modern conservative ideology—preferences for less government regulation of economic and civil rights policy, traditional social and cultural structures, a hawkish foreign policy, and opposition to taxes and redistribution—crystallized in the 1950s with the publication of William F. Buckley's *God and Men at Yale*. Buckley, who went on to found *The National Review*, was the most important intellectual figure in early modern conservatism. In the book that launched his career, Buckley argued that the Yale faculty's support of a secular worldview, racial equality,

cultural relativism, Keynesian economics, and government intervention into the economic sphere was inherently unconservative. Instead of inherently objective or unbiased, Buckley framed this knowledge regime as liberal, while conservatism represented an opposite but equally valid worldview which deserved equivalent representation in academia. Thus, it required a conservative counterweight. Soon after his book was published, he founded *The National Review*.

Before Buckley, even the nominally conservative American Economic Association (AEA), renamed the American Enterprise Institute for Public Policy in 1962, was forced to conform to the technocratic knowledge regime. AEA was founded by a group of New York City businessmen in 1938 with a mission to achieve, “greater public knowledge and understanding of the social and economic advantages accruing to the American people through the maintenance of the system of free, competitive enterprise.”⁸ It tended to produce rigorous research similar to the Brookings Institution, including important scholarly contributions in the area of anti-trust and labor law (Stahl 2016). However, AEA reports almost always arrived at the conclusion that less government intervention was good for the economy (Stahl 2016). AEA’s fundraising tended to rely on large corporate donors, overlapping heavily with the Chamber of Commerce (Stahl 2016). Despite their free market mission and mild conservative lean, AEA still largely bought into the technocratic consensus, and was not integrated into the Republican Party

⁸ “History of AEI”, *American Enterprise Institute*. Available online at <https://web.archive.org/web/20090708195505/http://www.aei.org/history>. Accessed January 14, 2020.

(Stahl 2016). This status quo began to change under the presidency of William Baroody Sr. in the 1950s and 1960s. Baroody, who changed the name of the organization to the American Enterprise Institute for Public Policy (AEI), worked with Barry Goldwater's 1964 presidential campaign to craft a conservative policy platform (Stahl 2016). However, Baroody clashed with Buckley and other Goldwater advisors, who thought Baroody and AEI's policies were insufficiently conservative (Stahl 2016). AEI's culture and ethos was still largely grounded in the technocratic knowledge regime, awkwardly positioning it in between the current mainstream consensus and the newly insurgent conservatives (Stahl 2016). It also suffered from its reliance on corporate donors, rather than conservative foundations or individuals (Stahl 2016). AEI was not successful at influencing the policy process in a conservative direction, outside of a few key issues, until much later. Republicans, led by Richard Nixon, continued to expand the scope of the federal government into the 1970s (Jones, Theriault, and Whyman 2019).

The beginning of the end of the era of technocratic knowledge regime began with the creation of the Heritage Foundation in 1973. Heritage was founded by three former Republican staffers who were unhappy the Republican Party's embrace of federal government programs to solve policy problems (Edwards 1997). Heritage rapidly changed the structure of new think tanks in the United States and the relationship between elected officials, parties and think tanks. Heritage, and the numerous organizations founded or modified in its image, would provide a means through which ideological conservatives could capture the Republican Party.

Heritage produced several important innovations in think tank operations. First, it built an organizational structure where researchers and support staff act strategically and coordinate, rather than work independently with only ad hoc teamwork. One former senior Heritage Foundation manager described the difference between the university model and new model as the difference between a “condominium” and a “tight neighborhood.”⁹ In the former, researchers are only related by proximity, while the latter is able to work together to produce something greater than the sum of its parts. Heritage management exercised more control over the organization’s policy agenda by producing conservative research in advance of policy debates.

Indeed, this structural change is at the heart of the organization’s founding legend.¹⁰ According to Edwards (1997, 3-4), in 1971, Congress debated whether to fund research and development into a supersonic commercial airliner. Conservatives opposed the spending as an unnecessary and wasteful government entry into a free market function. The measure failed by just a few votes. A few days later, Heritage’s two principal founders, Paul Weyrich and Ed Feulner, met for breakfast in the House cafeteria. Weyrich was angry at the American Enterprise Institute, who had published a study on the pros and cons of federal funding of supersonic commercial jets a few days after the vote. Weyrich asked William Baroody Sr. why he didn’t release the study before the vote. Baroody replied, “We didn’t want to try to affect the outcome of the vote.”

⁹ Interview with a former senior Heritage researcher, July 2017.

¹⁰ Like many legends, this story has been repeated many times with slightly different details. Any individual facts may be apocryphal. The version of the story that I recount here is drawn from Edwards (1997). Edwards is the organization’s internal historian, writing its autobiography to celebrate its 25th anniversary.

Feulner and Weyrich decided that conservatives needed a new organization that would anticipate the Congressional policy agenda and act to influence it.

Second, Heritage aggressively marketed its research. While most think tanks are more adept at putting their research in front of policymakers than academics, Heritage invested far more resources into marketing than other think tanks (McGann 2016; Rich 2005). They were the first think tank to have an office of Congressional liaison, allowing them to understand where Republican leaders expected the policy agenda to focus on in the near future.¹¹ While other think tanks were writing long technical reports appropriate for an academic or specialist setting, Heritage edited their reports down to short briefs, so they could pass “the briefcase test,” – small enough to fit in a briefcase and be read in the time it took to drive from Congressional offices to DC National Airport (Rich 2005). This aggressive marketing and brevity allowed Heritage an advantage over its competition in convincing allied policymakers to rely on their policy analysis when making decisions.

In the days before email, communicating rapid responses presented a logistical challenge. One former Heritage staffer spoke fondly of “report days” in Heritage’s basement.¹² He would often write a brief late at night on a typewriter on short notice if an agenda item was about to come up. In the morning, he would give the report to a group of interns in the basement, which contained a large, expensive Xerox machine. At the time, far cheaper copying options existed than the Xerox machine, such as screen printing. However, only the Xerox machine could collate copies of the report, saving time. Every

¹¹ Interview with a former senior Heritage researcher, July 2017.

¹² Interview with a former senior Heritage researcher, July 2017.

intern at Heritage would wait on the far end of the Xerox machine, collecting reports. When they collected a handful of reports, they would run deliver them by hand to each House and Senate office, as well as slipping a copy under each door at the National Press Club.

Finally, Heritage developed a more diverse fundraising strategy. Instead of relying on large foundations or government contracts, they borrowed a grassroots strategy from Republican electoral politics, raising money from a diverse group of individual conservative donors (Abelson 2004). Because individual donors tend to be more ideological than foundations with technocratic traditions like the Ford Foundation, they were able to produce more conservative or liberal information than university-based models (Rich 2005). It also allows the organization considerable autonomy from donors. Ed Feulner, who was President of the Heritage Foundation from 1977-2013, wrote,

“The importance of [having a diverse donor base] was made clear to us some years ago when a corporate CEO, taking exception to our policy in favor of free trade, ripped up a check for a six-figure contribution. Such short-term losses are significant, of course, but by accepting them, we strengthen the allegiance of our more numerous small donors.” (Feulner 2000, 71)

Members tended to trust the information more than information patronized by corporations, because they were receiving conservative ideas rather than self-interested ones.¹³

Collectively, these innovations created a new model for think tanks. Most modern think tanks in the United States now adopt what McGann (2016) classifies as an

¹³ Interview with a former senior Heritage Foundation researcher, July 2017.

“advocacy” model,¹⁴ where they act more like interest groups than universities. It was adopted by a wide range of think tanks, including other conservative think tanks such as the Cato and Manhattan Institutes, later progressive think tanks like Demos and Economic Policy Institute, and numerous think tanks representing more traditional interests, such as the progressive pro-Israel group J Street (Medvetz 2014).

Heritage was enormously successful in influencing the Republican Party. The organization quickly became closely connected to Ronald Reagan and the conservative faction of the Republican Party. It supported Reagan’s challenge against Gerald Ford, whom Heritage saw as insufficiently conservative, in the 1976 Republican nomination contest (Edwards 1997). After Reagan won the 1980 election, Heritage played an important role in the Reagan transition (Brown 2011; Jones and Williams 2008). When parties enter government, they must rapidly fill thousands of executive branch jobs, develop a policy agenda, and immediately execute it. Unlike in many democracies, U.S. parties do not form shadow governments to prepare a policy agenda should they win the next election. As a result, parties often draw many of their appointees from interest groups and think tanks (Brown 2011; Ricci 1993). Heritage had spent much of 1979 and 1980 preparing a 3,000 page, 30 pound, document titled *Mandate for Leadership*, laying out a plan for the first year of the Reagan Presidency (Edwards 1997). The document contained more than 2,000 concrete policy recommendations for the executive and legislative branch in close cooperation with Reagan’s transition team. Reagan personally

¹⁴ Others, such as Rich (2004), propose a similar “marketing” think tank label.

passed out copies of *Mandate* at his first cabinet meeting (Edwards 1997). Reagan appointed at least twenty-three contributors to *Mandate* into senior policy roles (Edwards 1997). *Mandate*, and subsequent support from Heritage, allowed Reagan to move quickly and achieve a number of conservative policy goals, including a \$749 billion tax cut, a large increase in defense spending, cuts to social welfare spending and the Urban Jobs and Enterprise Zone Act of 1981 (Edwards 1997). Heritage later claimed that the Reagan Administration implemented 60% of *Mandate*'s policy recommendations in his first term (Edwards 1997). Few interest groups can claim such a record of success at influencing American public policy.

Other conservative think tanks followed in Heritage's footsteps. The 1970s and early 1980s saw an explosion in the number of think tanks in Washington (Bertelli and Wenger 2009). Many were highly ideological, conservative advocacy think tanks modeled after Heritage (McGann 2016). Charles Koch and two libertarian conservatives founded the Charles Koch Foundation, later renamed the Cato Institute, in 1974. William Casey, a former Nixon Administration appointee and future Reagan CIA Director, founded the Manhattan Institute in 1977. Manhattan most notably employed Charles Murray, whose *Losing Ground* and *The Bell Curve* provided much of the conservative case underlying the backlash to federal welfare policy and the mid-90s reform (Heckman 1995; O'Connor 2001). While the American Enterprise Institute retained its university model, it significantly changed its operations following Heritage's success. AEI hired a large number of conservative full-time resident scholars after decades of focusing on visiting or adjunct university professors (Stahl 2016). It released a policy agenda for the

second term of the Reagan presidency modeled on Mandate (Medvetz 2014). It began to raise money from wealthy conservative ideologues, rather than relying on corporate donors (Stahl 2016). AEI began to work more closely with grassroots conservatives, rather than just business groups (Stahl 2016). More recently, conservative policy entrepreneurs (including Charles Koch) founded numerous think tanks in individual states, connecting them together to share information and resources with the State Policy Network (Hertel-Fernandez 2019; Hertel-Fernandez, Skocpol, and Lynch 2016).

Collectively, these organizations created an alternative conservative knowledge regime. Conservatives framed the mainstream media, universities, Keynesian economics and non-partisan institutions as inherently liberal, rather than unbiased or mainstream. They sought to elevate academic research that reached conservative conclusions out of universities to equal footing with what they considered liberal research.¹⁵ When surveyed, Republican legislative staff answer that they prefer information that they know conforms to their ideological beliefs over information that is unbiased, while Democrats and elite journalists answer the opposite (Rich 2005). While there were few large and active progressive think tanks in 1997, when Rich performed his surveys, Democrats tended to rate them lower than non-partisan think tanks like Brookings, RAND and NBER.

One illustrative modern example of this alternative conservative knowledge regime is Conservapedia. This website was founded by Andrew Schlafly, son of the

¹⁵ Interview with a former Heritage Foundation researcher, July 2019.

famous conservative activist Phyllis Schlafly, in 2006. Schlafly founded the site in response to his belief that Wikipedia moderators were tilting an article on a debate over teaching evolution in Kansas schools away from creationism (Zeller 2007). The site's self-described ethos rejects positivism as a concept for an encyclopedia to strive for, rather insisting that all facts are inherently biased.

“Conservapedia strives to keep its articles concise, informative, family-friendly, and true to the facts, which often back up conservative ideas more than liberal ones. Rather than claim a neutral point of view and then insert bias, Conservapedia is clear that it seeks to give due credit to conservatism and Christianity. Schlafly said in regard to the point of view issue, "It's impossible for an encyclopedia to be neutral."¹⁶

According to Schlafly's logic, facts can only be liberal or conservative. Therefore, disagreement with conservatives necessitates alternative facts. In one entry that best exemplifies this ethos and its conflict with the technocratic knowledge regime, Conservapedia defines “econometrics” as,

“**Econometrics** is a field of economics that uses statistics to analyze economic data for patterns. It is frequently used by liberal influences in economic think tanks, like the Brookings Institution, to justify increased government deficit spending in order to weaken America's currency advantage in world trade.”

In these two sentences, the conservative ethos regarding positivism is clear. The first sentence correctly defines econometrics in positivist terms. The second sentence notes that positivism is used to justify policy outcomes that conservatives disagree with, notes that liberals use positivism, and specifically points to activities of a non-partisan think

¹⁶ Quoted in “Conservapedia”, Conservapedia. Available online at <https://www.conservapedia.com/Conservapedia>. Accessed 1/16/2020.

tank as an example of the relationship between anti-conservative policy change and positivism.

Republican politicians also express the same sentiment. In another example, former Senator Rick Santorum addressed the Values Voter summit in 2012,

“We will never have the media on our side, ever, in this country. We will never have the elite smart people on our side, because they believe they should have the power to tell you what to do. So our colleges and universities, they’re not going to be on our side. The conservative movement will always be – and that’s why we founded Patriot Voices – the basic premise of America and American values will always be sustained through two institutions, the church and the family.” (Santorum 2012)

Santorum makes it clear that science, scientific institutions and the media are inherently and inevitably anti-conservative, and so alternative institutions are necessary to promote conservative policy preferences. In a final example, columnist Ron Suskind recounts a 2002 conversation with an anonymous George W. Bush White House official where the official explicitly argued against positivism,

“The aide said that guys like me were "in what we call the reality-based community," which he defined as people who "believe that solutions emerge from your judicious study of discernible reality." I nodded and murmured something about enlightenment principles and empiricism. He cut me off. "That's not the way the world really works anymore," he continued. "We're an empire now, and when we act, we create our own reality. And while you're studying that reality -- judiciously, as you will -- we'll act again, creating other new realities, which you can study too, and that's how things will sort out.” (Suskind 2004)

The anonymous official perhaps best summarizes the goal of the conservative reaction to the technocratic era. Conservatives saw that a reality-based community came to conclusions about public policy that they did not agree with. They sought to build their own reality and convince the Republican Party to adopt it. They did so by creating a

knowledge regime centered around party-aligned think tanks, rather than the existing knowledge regime centered around government agencies, universities and non-partisan think tanks.

Progressive counter-reaction (2000s-present)

Progressives Democrats were slow to respond to trend of advocacy-oriented think tanks with clear ideological missions and deep integration into political parties. For the most part, Democrats continued to value rigorous, non-partisan research produced by universities and non-partisan organizations (Grossmann and Hopkins 2016; Rich 2005). As with conservative Republicans, some progressive Democrats founded advocacy-style think tanks in the wake of the Heritage Foundation's success, such as the Center on Budget and Policy Priorities (CBPP) and Economic Policy Institute (EPI). Despite their progressive missions, these organizations both maintained a technocratic ethos (Grossmann and Hopkins 2016; Rich 2005) and were much smaller than the Heritage Foundation.¹⁷

However, moderate Democrats, who believed that the party's electoral defeats in the 1980s were caused by a shift too far to the left, did respond. In 1985, a group of moderate Democratic elected officials founded the Democratic Leadership Council (DLC) in order to move the party to the center. The DLC was the chief party organization supporting the New Democrats, a moderate faction of the party that included Bill Clinton.

¹⁷ The Center on Budget and Policy Priorities and Economic Policy Institute had budgets of \$4 million and \$3 million in 1996 (Rich 2005). In contrast, the Heritage Foundation, American Enterprise Institute and Brookings had budgets of \$25 million, \$13 million and \$17 million, respectively.

As part of their effort to move the party to the center, they founded the Progressive Policy Institute (PPI), a centrist think tank, in 1989. Despite its name and association with the Democratic Party, PPI often supported quite conservative policy proposals. For example, during the 1996 welfare reform debate, PPI supported welfare work requirements and time limits, and criticized progressive plans to expand aid to the poor (Medvetz 2014). They often clashed with both more progressive think tanks such as the Center on Budget and Policy Priorities and Economic Policy Institute, but they were “scarcely audible over the din of their conservative competitors.” (Medvetz 2014, 207). PPI defined much of the Democratic Party’s policy agenda during the 1990s.

Mainstream Democrats led by former Bill Clinton Chief of Staff John Podesta thought the DLC had pushed the Democratic Party too far to the center (Dreyfuss 2004; Savage 2008). The 1990s and early-2000s were defined by Democrats losing debates not only on welfare, but also on marriage equality, tax cuts for the wealthy and the Iraq War. In order to move the party to the left, they founded a think named called the Center for American Progress (CAP). CAP would provide a left-of-center counterweight to AEI and Heritage. Podesta was supported by a \$30 million grant from a group of Democratic Party mega-donors known as the Democracy Alliance, led by George Soros, Peter Lewis and Herb and Marion Sandler. CAP was immediately the largest Democratic-aligned think tank in the United States.¹⁸ Unlike Heritage, which began as an outsider group looking to capture the Republican Party, CAP was much more explicitly allied with the

¹⁸ Author’s count of IRS Form 990 filings of party-aligned think tanks contained in the ProPublica Non-Profit Explorer database.

Democratic Party from the outset. For example, Bob Boorstin, a CAP researcher focused on national security, described his mission as explicitly aiding the Democratic Party,

“My job is to take the thirty-five-point gap and shrink it, so that we’re viewed as credible again,” [Boorstin] said. “It’s vital that we Democrats demonstrate through our ideas that we are not a bunch of wimps.”¹⁹

Furthermore, Podesta described its mission as an intra-party organization focused on representing the party’s mainstream, which felt tugged on by both centrists and more extreme left-wing groups (Dreyfuss 2004). At the same time, the organization was designed as a modern update of the Heritage advocacy model. Indeed, the CAP founders informally consulted with Heritage management about how to best organize their think tank.²⁰

In addition to producing policy analysis, CAP built its apparatus to engage actively in policy debates, both in the media and the halls of Congress. CAP was one of the first think tanks to set up an independently-financed companion 501(c)(4) lobbying organization called the Center for American Progress Action Fund, which allowed its employees, many of whom were employed by both organizations, to lobby and engage in electoral politics more freely than 501(c)(3) employees. Heritage would follow up a few years later by creating their own 501(c)(4) companion organization named Heritage Action. Jennifer Palmieri, CAP’s first communication director who would eventually hold Communication Director titles for the Obama White House and Hillary Clinton 2016 campaign, sent CAP experts out to engage in television news debates. Shortly after

¹⁹ Quoted in (Scherer 2008)

²⁰ Interview with a former Heritage Foundation senior researcher, July 2017.

CAP was founded, a talk show booker stated, “For conservatives, we can call Heritage or AEI. Now we have a place to get liberals.”²¹

CAP was quickly integrated into the Democratic Party. CAP presidents John Podesta and Neera Tanden chaired the Obama and Clinton transition committees. For the Obama Administration, CAP followed the lead of Heritage’s Mandate by preparing a similar document, *Change for America: A Progressive Blueprint For The 44th President*, to lay out an agenda for the executive branch (Scherer 2008). Like the original Mandate, many of the authors of *Change* went on to be nominated to agencies in order to implement their own recommendations, including the Solicitor General, Secretary of Health and Human Services, Director of the National Economic Council, and Director of the Office of Management and Budget. Tanden also served on the 2016 Democratic platform committee.

In addition to their transition work, CAP research formed the basis of much of the first term of the Obama Administration. While working for CAP, former Senate Leader Tom Daschle published *Critical: What We Can Do About the Health-Care Crisis*, as a partial blueprint for what would become the Affordable Care Act (Daschle 2008; Pear 2008). *Critical* was both a political and policy book – diagnosing the problems of the American health care system, explaining why past attempts at universal health care failed, and laying out a politically feasible reform plan that Democrats could pass in 2008. While Daschle’s nomination to HHS ultimately failed, his ideas heavily influenced

²¹ Quoted in Dreyfus (2004)

the Affordable Care Act (Marmor 2014). CAP was also instrumental in designing much of the domestic spending contained in the American Recovery and Reinvestment Act (ARRA). In September 2008, shortly before Lehman Brothers declared bankruptcy but after it was clear that a major recession was coming, CAP proposed a \$100 billion “Green Recovery” package, which would both stimulate the economy and jump start a shift toward renewable energy (Podesta 2008). ARRA included many of Podesta’s recommendations, including loan guarantees for renewable energy, subsidies for wind and solar energy installation, subsidies for “smart grid” technology and tax credits to retrofit buildings for increased energy efficiency.

More recently, CAP helped define the mainstream Democratic plan to build on the Affordable Care Act. In February of 2018, it released “Medicare Extra for All,” a detailed plan which would allow individuals and businesses to buy in to a public insurance plan administered by the Center on Medicare and Medicaid Services.²² They later released “The High Cost of Hospital Care,” a detailed plan to regulate prices at hospitals.²³ The plan closely resembles Medicare buy-in plans later introduced by Pete Buttigieg, Joe Biden, and Amy Klobuchar during the 2020 Democratic nomination contest, as well as the Choose Medicare Act.

Other progressive think tanks followed CAP’s example. Most notably, the Center on Budget and Policy Priorities (CBPP) rapidly increased in size. In 2004, CBPP spent

²² “Medicare Extra for All” Center for American Progress, 2018. Available online at <<https://www.americanprogress.org/issues/healthcare/reports/2018/02/22/447095/medicare-extra-for-all/>>

²³ Gee, Emily. “The High Cost of Hospital Care.” Available online at <<https://www.americanprogress.org/issues/healthcare/reports/2019/06/26/471464/high-price-hospital-care/>>

\$9.3 million.²⁴ By 2006, the CBPP budget increased \$16 million in 2006. Between 2012 and 2017, it ranged from \$29 million to \$33 million. New America, a center-left foundation founded in 1999, grew from \$4 million in 2004 to \$7 million in 2006. Thanks in part due to large donations from Google chairman Eric Schmidt (R. Cohen 2018), New America grew to \$20 million the early 2010s and \$36 million by 2017.²⁵ These think tanks and others formed the basis of a progressive knowledge regime.

U.S. think tanks as party-like organizations

Political parties have substantial policy advisory needs. They need to prioritize and define problems, search for or develop policy solutions to those problems, decide on positions, and make arguments defending their positions to voters. In most advanced democracies, party think tanks fill the policy advisory role. Unlike U.S. think tanks, who are legally prohibited from formally affiliating with a political party as 501(c)3 organizations, party think tanks are formally affiliated with and controlled by political parties (McGann 2016). Many of these organizations are quite large. For example, Germany's Konrad Adenauer Stiftung (KAS), the think tank affiliated with the Christian Democratic Party (CDU) and European People's Party (EPP) raised €177 million in

²⁴ Expenditure data drawn from IRS Form 990s contained in ProPublica's Non-Profit Explorer database.

²⁵ Author's count of IRS Form 990 filings of party-aligned think tanks contained in the ProPublica Non-Profit Explorer database.

2017.²⁶ They are also largely publicly financed; KAS received €172 million in grants from the German federal government in the same year.²⁷ Because of their formal affiliation, these party think tanks tend to take on a lower profile role in their country's politics (Braml 2006). These systems also tend to have weak privately-funded think tank ecosystems (Braml 2006), perhaps because they struggle to compete with the party think tanks.

While the U.S. has no formal party think tanks, U.S. political parties also need various kinds of policy analysis. However, these needs differ from parties in systems with strong party discipline, like Germany. Parties in the United States do not make direct policy decisions. Formal party organizations only nominate candidates, release a party platform and raise money to spend on elections and related activity. Much of the conflict over the party's policy positions and eventual policymaking in government occurs outside of the formal party apparatus in the extended party network (Kathleen Bawn et al. 2012). The party network can use policy analysis to search for problems, identify or develop solutions that fit the party's ideological preferences, bring members to consensus, share ideas and information (Albert 2019; Koger, Masket, and Noel 2010) and make policy arguments in the public sphere (Rich 2005). While they receive information from a variety of sources, U.S. parties have come to rely on think tanks to perform this role. In their comparative study of knowledge regimes in the United States, France,

²⁶ Konrad Adenauer Stifftung. 2018. *Annual Report. Insights into 2018*. Available online at <<https://www.kas.de/en/web/guest/single-title/-/content/deutschland-das-naechste-kapitel-jahresbericht-2018>> Accessed 1/27/2020.

²⁷ Public financing structures vary by country. Some party think tanks are funded through the country's university system (Campbell and Peterson 2014).

Germany and Denmark, Campbell and Pedersen (2014) find that some U.S. think tanks perform many of the same functions as party think tanks in the other countries: bringing ideas from broader knowledge regimes into party positions. Albert (2019) finds that they are critical actors in the party network, bringing in ideas from outside research sources and transmitting those ideas to both officeholders and interest groups in the party network.

However, despite their role as party-like organizations, U.S. think tanks are not controlled by the political party or their officeholders. Think tanks like the Heritage Foundation and Center for American Progress are 501(c)3 non-profit organizations, funded primarily by grants from foundations and large individual donations. Unlike formal party organizations, their fundraising is autonomous and independent from the party's officeholders (McGann 2016). Thus, as with other members of the extended political party, they have independent goals from officeholders and formal party organizations. They seek to change public policy by moving their party's positions—to the right or left in the case of organizations like the Heritage Foundation and Center for American progress, or to the center in the case of the Progressive Policy Institute. This role differs from party think tanks in other democracies, where the think tank acts as an agent of the political party.

Not all think tanks occupy this party organization-like role. Some think tanks are just think tanks. Even in systems with formal party think tanks, political parties receive policy analysis from a variety of sources, including other think tanks (Braml 2006). In Germany, only about one-in-six think tanks is a party think tank (Thunert 2004). In the

United States, these distinctions will be even less clear. Researchers have generally referred to U.S. think tanks by their ideological orientation, rather than their role in political parties (Groseclose and Milyo 2005; Stahl 2016). However, some research has started to consider think tanks as party actors. In *Asymmetric Politics*, Grossmann and Hopkins (2016) compare information produced by Republican and Democratic-aligned think tanks, finding that they follow many of the same patterns of differences in party platforms, rhetoric, and other outputs. Albert (2019) finds that think tanks are important vectors of information in party networks. Fagan (2019) uses their activities as representatives of the party's elite. We should expect think tanks that operate as party integrated organizations to perform different functions than those that do not. Parties should treat them as potential shadow governments and privileged sources of information above and beyond other think tanks or interest groups. While parties do occasionally collaborate, they should primarily work with co-partisans in government. Thus, if we are to study the role of these organizations, we must pay careful attention to case selection.

RESEARCH DESIGN

In the first section, I established that some think tanks in the United States have taken on a pseudo-party role in American politics. While not formally affiliated with political parties, party-aligned think tanks fill a role in U.S. politics filled by formal party organizations in most democracies. They are important pieces of modern U.S. party knowledge regimes, particularly for Republicans. The purpose of this next section is to select cases of U.S. party-aligned think tanks to study in order to understand their impact

on political parties. In order to do so, it first defines two terms in the U.S. context: think tanks and party alignment. Next, I select U.S. party-aligned think tank cases to study for the remainder of this dissertation. I select the four largest party-aligned think tanks: the American Enterprise Institute, Center for American Progress, Center on Budget and Policy Priorities and Heritage Foundation.

Definitions

As Rich (2005) notes, think tanks have attracted relatively little attention from political scientists when compared to more traditional interest groups or NGOs. In contrast, some think tanks loom large in Washington politics. Rich attributes the discrepancy to the discipline's broad acceptance of theories of political decision-making based in raw power and rational self-interest and the lack of political conflict around which expertise ultimately informs policymaking decisions. However, he argues, this dynamic has changed,

“This limited view of the role of expertise may have been more justifiable in an era when the underlying, “rules of the game,” were basically agreed by scholars to consist of a “consensus” in support of expanding social welfare commitments on the domestic front. When the underlying tenets of Keynesian economics were basically shared by Republicans and Democrats alike, for example, visible battles were often restricted to competing interests’ claims to public privileges and resources.” (Rich 2005 8-9)”

Scholars, including Rich, have struggled to create a concise and analytically useful definition of a think tank. More than a thousand organizations in the United States identify as a “think tank” (McGann 2016). As Medvetz (2014) notes, the term is “a

murky, fuzzy concept that cannot be nailed down perfectly.” (16). Think tanks produce policy information, but so do universities, interest groups and media organizations. To make matters worse, many of these organizations will themselves establish child organizations, either formally related or through patronage, that identify as think tanks. If think tank is a useful analytical concept, its definition must separate it from all of these organizations from the ones we want to study. The United Nations Development Program (UNDP), which often funds think tanks in new democracies, defines the term as,

“organizations engaged on a regular basis in research and advocacy on any matter related to public policy. They are the bridge between knowledge and power in modern democracies.” (UNDP 2003, 6)

However, in the U.S. context this definition is inclusive of traditional interest groups, who also engage in research and advocacy in matters related to public policy on a regular basis. McGann (2016) proposes a definition that suffers from the same problem,

“organizations that generate policy-oriented research, analysis, and advice on domestic and international issues that enable policy-makers and the public to make informed decisions about public policy issues.” (10).

He solves the problem by applying a detailed typology to the problem, dividing think tanks into autonomous and independent, university, party, contract, vanity, etc. (see also McGann and Weaver 2000). While this added complexity is analytical useful for a comparative study of think tanks, it is costly for this project. However, Rich (2005) cuts through this complexity and incorporates some of the typologies into his definition,

“Independent, non-interest-based, nonprofit organizations that produce and principally rely on expertise and ideas to obtain support and to influence the policymaking process.” (11)

This definition eliminates traditional interest groups who influence policy through many means, including information, groups that are dependent on a single individual or industry donor, such as trade groups, media, for-profit research firms and universities. Rich adds that single-issue think tanks tend to have a different function than “full service” organizations and eliminates them from his inquiry by limiting his sample to organizations that, “produce research and studies that span the broadest array of issue domains” (11). I include this caveat in my final definition:

“Independent, non-interest-based organizations that seek to influence public policy on a broad range of issues primarily through the provision of policy information.”

Next, we must differentiate think tanks that act as pseudo-party organizations from those that are merely think tanks. While scholars of think tanks have put considerable effort into understanding think tanks by dividing their functions and organizational forms into typologies (McGann 2016; McGann and Weaver 2000; Rich 2005; D. Stone 1996), existing schemas do not identify a pseudo-party role occupied by U.S. think tanks. For this definition to be analytically useful in the U.S. context, it must capture the role of party think tanks, but allow for a different organizational structure. It must also separate think tanks which are integrated into political parties from those that are merely preferred by members of one party over the other.

McGann and Weaver (2000) define the role and structure of party think tanks. They define party think tanks as think tanks that are:

- primarily staffed by party members or loyalists;

- financed by the either the formal party organization or government subsidies;
- with an agenda that closely follows the party's platforms;
- produce a variety of work products, ranging from legislation to white papers to talking points for media debates, on a broad range of issues.

To translate the concept of a party think tank into the U.S. context, we must interpret these criteria to the U.S. context. First, U.S. parties have no formal membership. U.S. parties in government do appoint or hire officials to perform policy duties, but U.S. think tanks that are deeply integrated into political parties will serve as homes for party policy officials when they are not in government. Second, U.S. formal party organizations and governments do not finance party think tanks. However, U.S. parties and their elected officials are financed by their own networks of donors (Koger, Masket, and Noel 2009). U.S. think tanks that are deeply integrated into political parties should draw from similar networks of donors, although their 501(c)3 status, which allows them to accept unlimited donations, will bias their donor base toward very large party-connected donors. Finally, while parties release platforms that influence legislative agendas (Fagan 2018), weak party discipline, the separation of legislative and national parties and divided government make them a poor indication of the party's core priorities at any given time. U.S. party-integrated think tanks should produce policy information on the party's longstanding core issue priorities, or their owned issues, primarily for the consumption by their co-partisans (Egan 2013; Fagan 2019).

I refer to these think tanks as party-aligned think tanks, rather than party or pseudo-party think tanks. U.S. party-aligned think tanks occupy both the pseudo-party role and also function as interest groups with their own goals. I identify them using this definition:

Think tanks that are aligned with one political party are staffed by future or past party appointees or officeholders, produce a variety of policy information on a broad range of party priorities, work primarily with one party and are financed by similar networks of donors.

Case Selection

Next, I select cases to study. One strategy would involve selecting all organizations that meet the definition of party-aligned think tank. Doing so would create a comprehensive and representative sample of party-aligned think tanks in the United States. However, this option is infeasible given the onerous quantitative data collection in chapters 4, 5 and 7. There are many small party-aligned think tanks, and each would present its own data collection challenge to solve. Furthermore, smaller think tanks would present more edge cases, where an organization might not fit cleanly into the definitions above. An alternative strategy would be to create a list of party-aligned think tanks and randomly sample from the list. This strategy solves the feasibility problem, but risks leaving out the most influential and important organizations from the sample. Instead, I

use a third option: selecting the largest party-aligned think tanks, with total expenditures serving as a proxy for influence.

Using internet searches, I identified all of the prominent think tanks that meet the definition of party-aligned think tanks. Next, I selected the four largest think tanks by average expenditures from 2004-2016 according to IRS Form 990 filings stored in ProPublica’s Non-Profit Explorer database, two from each party. Table 2.1 shows these organizations, their average real expenditures from 2004 to 2016, and their expenditures in 2016.

Institution	Orientation	Average Expenditures	2016 Expenditures
American Enterprise Institute	Republican	\$27.7 million	\$42.2 million
Center for American Progress	Democratic	\$35.2 million	\$43.8 million
Center on Budget and Policy Priorities	Democratic	\$23.0 million	\$25.8 million
Heritage Foundation	Republican	\$68.6 million	\$84.6 million

Notes: Real 2009 dollars. Source: IRS Form 990 filings, retrieved from ProPublica’s Non-Profit Explorer database.

Table 2.1: Average Revenue of Party-Aligned Think Tank Cases, 2001-2016

On the Republican side, I selected the Heritage Foundation and American Enterprise Institute. Both organizations clearly meet my definition of party-aligned think tanks. They both receive funding from Republican elites; Heritage tends to raise more from wealthy ideological conservatives, while AEI tends to raise from the Chamber of Commerce wing of the party (Stahl 2016). They both produce a variety of policy information on a broad range of party priorities (Fagan 2019). Recent data suggest that they send considerable employees to staff the executive branch. Figure 2.2 shows the

distribution of appointees from a selected group of organizations.²⁸ Republican-aligned think tanks are very well represented on this list. The Heritage Foundation was the second most common previous employer of a Trump Administration employee, after the Trump campaign. The American Enterprise Institute was the fourth most common employer. These appointees include numerous high-profile policy jobs, including the Secretaries of Transportation, Secretary Education, Secretary Labor, chair of the White House Council of Economic Advisors and Commissioner of the Food and Drug Administration, as well many more high-level agency deputy secretary, policy planning and general counsel jobs. Other prominent and large Republican-aligned interest groups like the National Rifle Association, U.S. Chamber of Commerce and National Right to Life received many fewer appointments and less prominent jobs. Similarly, non-partisan information producers and Harvard University and the Brookings Institution similarly received fewer appointments.

²⁸ Trump for America, Inc, Donald Trump's presidential campaign was by far the most common previous employer of Trump Administration employees, with 118 appointments. These are excluded from Figure 2.2 in order to better show the variation of all other organizations.

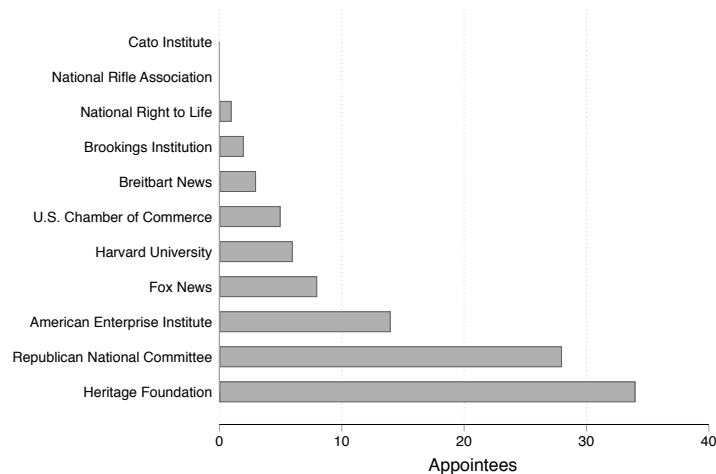


Figure 2.1 Trump Political Appointees from Select Organizations

On the Democratic side, I selected the Center for American Progress and Center on Budget and Policy Priorities. Of these, CAP is most comparable to AEI and Heritage. It was created with large donations from top Democratic Party funders (Dreyfuss 2004). It produces a variety of information on a broad range of issues. More than even the Heritage Foundation, CAP conceives of its mission as one in service of the political party (Scherer 2008). While the ProPublica data aren't available for the Obama Administration, CAP was at the forefront of staffing it (Brown 2011). CAP President John Podesta chaired the Obama Transition committee. Among other things, CAP produced a 665-page document outlining an early agenda for 56 agencies in the new administration based on CAP employee recommendations (Green and Jolin 2009). Many of the authors of these authors were appointed to the agencies which they wrote for, including the Solicitor General, Environmental Protection Agency Administrator, Director of the National

Economic Council, and Director of the Office of Management and Budget. The next CAP president, Neera Tanden, co-chaired the Hillary Clinton transition (Karni 2016) (Karni 2016) and served on the 2016 Democratic Party platform committee (Nichols 2016). CAP clearly occupies the role of a Democratic party-aligned think tank.

The Center on Budget and Policy Priorities, however, is a less clear case. Overall, it is a lower profile organization than the other three, smaller in terms of expenditures, and less information is generally available on its role in U.S. politics, funding and employee structure. While most scholars categorize them as a left-leaning think tank (Groseclose and Milyo 2005; Rich and Weaver 2000) and elite media tend to regard it as a progressive-leaning organization (for example, see Fernholz 2010; LaMarche 2014; Matthews 2018), CBPP works to maintain an unbiased reputation for policy analysis closer to non-partisan think tank like Brookings or the Urban Institute. Their 2016 funding primarily lists foundation donors, with many of the same progressive foundations and donors as the Center for American Progress.²⁹ While CBPP's founder, Bob Greenstein, was a former top Carter Administration official, it has seen fewer high-level executive branch officials appointed from its employees when compared with other think tanks. Their most prominent recent executive branch official was Jared Bernstein, Chief Economist and Economic Advisor to Joe Biden during his time as Vice President. Their leadership are largely drawn from mid-level Democratic staff with some staff moving

²⁹ The 2016 statement is available online at: <https://www.cbpp.org/sites/default/files/atoms/files/honorroll-final-2016-forwebsite.pdf>. The "Over \$500,000" section includes donations from Herbert Sandler and George Soros, the two surviving original donors to the Center for American Progress.

back and forth between CBPP and Democratic legislative or executive branch staff.³⁰ The Obama Administration sought out the advice of CBPP experts while crafting the 2009 stimulus bill; CBPP claims credit for crafting “about a third” of the bill (Dionne 2019).

SUMMARY

Like other organizations, political parties have policy advisory needs. The organizations, beliefs and practices that serve these needs over the long term constitute a knowledge regime. To understand U.S. knowledge regime, I divided modern U.S. political history into three eras. In the first era, a bipartisan consensus held that technocratic information sources in the form of experienced bureaucrats, universities and non-partisan think tanks would inform policymaking decisions. This consensus enabled the vast expansion of the scope of the federal government’s policy agenda during the 1950s-1970s. However, conservatives observed that because this technocratic information sources often supported the creation of new domestic policy interventions, Republicans tended to support those interventions instead of *laissez-faire* domestic policy. Despite the formation of the modern conservative ideology in the 1950s, conservatives were unable to swim upstream against the current of the scientific consensus.

The second era began when a group of conservative think tanks, led by the Heritage Foundation, created their own innovative policy analysis regime. These new conservative think tanks were more aggressive at strategically responding to the policy

³⁰ Interview with a senior CBPP employee, July 2017.

agenda, marketing, and working directly with the Republican Party. They successfully carved out a privileged role as a party-like organization. Their knowledge regime branded organizations that were formerly considered non-partisan like scientists and non-partisan think tanks as liberal, thus requiring a co-equal conservative counterpart. Their ideological worldview extended beyond a critique of the role of the federal government in policymaking to include a critique of positivism itself. Importantly, the Democratic Party did not immediately create its own equivalent knowledge regime, instead relying primarily on the non-partisan knowledge regime until the early 2000s.

The third and final era followed the creation of the Democratic Party's own party-aligned think tanks in the image of the Heritage-led conservative knowledge regime. A group of large Democratic donors and former Clinton Administration officials launched the Center for American Progress in 2003. CAP was the left's first true advocacy think tank that was built on a similar model to Heritage. It produced left-of-center policy analysis for the Democratic Party. CAP quickly assumed many of the privileged roles afforded to Republican-aligned think tanks such as staffing the executive branch and designing major policy initiatives. Other Democratic-aligned think tanks also grew rapidly during this period. While the non-partisan knowledge regime remains influential in Democratic Party politics, both parties now had their own partisan knowledge regime to fill a policy advisory role.

Chapter 3: Theory of Information and Political Parties

In Chapter 2, I established that party-aligned think tanks play an influential role in American party politics, in part by serving in a party organization-like role reserved for formal party organizations in most democracies. While this argument fits into the literature on comparative think tanks, it does not directly address the well-developed literature on party position-taking and American political parties. The goal of this chapter is to establish a theoretical framework through which we can predict how party-aligned think tanks can influence party positions, under what conditions they will be more or less successful at doing so, and the strategies that they will employ.

In the first section, I review the existing literature on party positions. These theories make a number of predictions about political party behavior, including that they are generally office-seeking organizations which strategically take positions in order to appeal to voters. However, more recent literature suggests that U.S. political parties function more as diverse coalitions with internal conflicts, and will change their positions based on changes in issue definitions, elites inside their parties, and the interests of important groups in their coalition. These theories suggest that while parties are office-seeking, they are constrained by the policy-seeking demands of the people and groups that they are composed of, rather than a strictly Downsian framework where parties respond directly to voter preferences. While they do a poor job of explaining how organizations that primarily produce information can be influential members of party coalitions, I note that Wolbrecht's theory of issue redefinition suggest they can play a

role in reframing and redefining how the parties see issues, and therefore cause endogenous change without changing the composition of the coalition.

Next, I review the literature on extended political parties, where parties are policy-seeking, rather than office seeking. Interest groups, activists, thought leaders, intellectuals, donors and other party elites get involved in party politics in order to change public policy, rather than simply to win elected office. In the extended party framework, groups demand that their co-partisan elected officials maximize their policy gains. While they care about winning elections, they see them only as instruments to policy-seeking and are willing to sacrifice some probability of winning in return for policy gains. In this framework, the extended political party seeks to control the party nominations process in order to assure that elected officials who support their policy positions. The modern progressive and conservative ideology, and thus the positions of the Democratic and Republican parties, emerged out of these policy demands. I note that that information producers like think tanks fit well into the extended party model, but some of their activity is difficult to explain. However, as with issue redefinition, they can play an important role in defining the preferences of the participants in extended party competition, and thus influence the party's policy positions.

In the second section, I develop my own theory of party position-taking. I begin by reviewing information theory, noting that policy information can rapidly change policymaker's preferences. Policymakers draw information from a large number of sources because information in politics is oversupplied (Jones and Baumgartner 2005). Because information is oversupplied, policymakers require heuristics to choose which

information to attend to and trust and which to ignore. I propose that the privileged role given to party-aligned think tanks in political parties allows them to exploit these heuristics and become privileged information providers. Next, I propose my own theory of party preferences. I argue that three factors determine party actor's positions: values, incentives and policy analysis. While most theories of party positions focus on the former two, I argue that policy analysis can also powerfully affect positions. Using this theory, I propose three strategies that party-aligned think tanks can use to change their party's positions: reframing, activating latent preferences and elite persuasion.

THEORIES OF U.S. PARTY POSITION-TAKING

Office-seeking and coalitional theories of political parties

There is a well-developed literature on position-taking by U.S. political parties. Unlike most other democracies, U.S. legislative parties are defined by relatively weak party discipline. Individual members have more freedom to make their own decisions on issues, and often take heterodox positions to accomplish their own goals. Political parties have a strong influence on the positions that they take, but these positions are not determinative. In future chapters, we will measure party position-taking using the expressed preferences revealed by voting in Congress, which are a collection of individual positions, rather than the positions of a party organization. Thus, when this chapter discusses party position-taking in the U.S., it is referring to the tendency of party members to take a certain position.

The most basic framework of party position-taking was created by Downs (1957), where parties position themselves in ideological space in response to voter preferences. Downsian parties are office-seeking, in the sense that they are single-minded seekers of seat maximization. The public is also rational; they decide who to vote for based on which party position is closest to their preferences, although they may rely on party reputations rather than observing specific position-taking in order to guess which party's positions are closest to their own preferences. Parties thus take positions according to the distribution of public preferences. Downs assumes that all issues can be expressed in single liberal-conservative dimension. If the public's preferences are normally distributed, parties in a two-party system will adopt very similar positions themselves close to the center of public opinion. If the distribution is bimodal, parties will take positions near the centers of the distribution. Party positioning changes only in response to changes in public opinion. While the Downsian framework explained much of why the political parties took very similar positions during the 1940s-1970s, it struggles to explain the more recent polarized era, where U.S. political parties rapidly shifted their positions on numerous issues (Poole and Rosenthal 1984), and in particular struggles to explain the specific realignment on civil rights issues (Carmines and Stimson 1990).

The next important theory of party position-taking was developed by Aldrich (1995). *Why Parties* argues that parties are primarily created, maintained and adapted by powerful elected officials and candidates to serve their own purposes. These elected officials mobilize activists, organize funders, and set up the party infrastructure. Aldrich's endogenous parties produce collective goods for the officeholders, and to some degree

enforce collective decision-making on their members. They follow the utility function of elected officials, which is a mix of office-seeking for the sake of holding office and policy-seeking (Poole and Rosenthal 1984). For Aldrich, party issue positions and priorities change only when the interests of the controlling officeholders and candidates change. Because officeholders and candidates have diverse goals, these factors contributing to position-change are complex, rather than a simple Downsian office-seeking model.

Wolbrecht (2000), examining party position changes on women's rights issues, argued that three factors lead to party position-taking: the preferences of party elites, the preferences of major coalitions within the parties and dominant frames and policy images surrounding the issue itself. As any of these factors change, party positions change. While issues are at equilibrium, party positions will remain fairly stable. However, they can go through rapid and powerful moments of redefinition, where the dominant policy image is replaced by a new one, changing the incentives of the party's elites and coalition. On women's rights issues, the two parties rapidly moved from a period of consensus during the 1950s and 1960s to a highly polarized period. The best example of this rapid change was from the Equal Rights Amendment (ERA). The ERA, which would have prohibited law from discriminating on account of sex, passed both chambers of Congress with broad bipartisan support in 1970, and was ratified by 30 states within two years. Both political parties supported the ERA in their platforms. However, Wolbrecht argues, the events of the 1960s and 1970s kicked off a rapid issue redefinition of women's rights issues. The dominant frame shifted to one of equality to a broader feminist critique of social and

cultural traditions rooted in the counterculture and social movements of the time.

Women's rights issues quickly became central to numerous policy debates beyond civil rights, such as health care and labor market policy. This redefinition changed the way that the issue interacted with party elites and coalitions. Republican Party elites and religious conservatives rapidly changed their preferences. Conservative states stopped ratified the ERA. Four states that had ratified the amendment in 1972 even took the drastic step of rescinding their ratification of the amendment.

Similarly, Karol (2009) focuses on coalition management strategies as causes of party position change. Karol's model argues that party positions are a function of the interests of the party coalition and change only when those interests change. He proposes three mechanisms which can change party positions: coalition maintenance, incorporation and expansion. Maintenance refers to changing positions as the interests of existing groups in the party coalition changes. For example, labor unions are an important part of the Democratic Party. In the middle of the 20th century, labor unions benefitted from free trade as the U.S. was a net exporter of manufactured goods. Thus, the Democratic Party supported free trade policies. When the U.S. became a net importer of manufactured goods, labor unions sought protectionist trade policies, and the Democratic Party became more protectionist. Coalition incorporation refers to adopting a policy position in order to bring a previously non-partisan group into the party. For example, the Republican Party adopted anti-abortion policy positions after the Fourth Great Awakening in order to bring in a new base of evangelical Christians into the party. Finally, coalition expansion refers to adopting broadly popular positions to attract support from the public generally, such as

the Republican Party supporting a hawkish foreign policy during the Cold War. Karol argues that the latter two strategies are led by elected officials in a model similar to Aldrich, while coalition maintenance are led by groups inside the party making demands internally.

Finally, Schickler (2016) proposes a similar model of party positions to Wolbrecht (2000) and Karol (2009), but emphasizes internal conflict in the parties. Schickler asks why the Democratic Party became the party of civil rights in the 1960s despite the importance of White southern to its coalition and the existence of progress leaders on the Republican Party such as Dwight D. Eisenhower. He argues that when the New Deal Coalition added organized labor, Northern African Americans and urban liberals to the party, it set off an internal party conflict over the party's positions on civil rights issues. Other groups inside the Democratic Party, in particular the Congress of Industrial Organizations (CIO), a large labor union, saw that their interests and missions were aligned with African Americans on civil rights issues. They worked to integrate African Americans into the Democratic Party starting in the 1940s, decades before Lyndon Johnson signed civil rights legislation which led to the slow realignment of the Southern Democrats to the Republican Party. Thus, Schickler argues, the shift on civil rights was the result of endogenous party conflict inside grassroots of the Democratic Party, rather than the strategic choices of elected officials or party leaders.

In general, these theories do not consider how information producing organizations like party-aligned think tanks can shift party positions. Generally, the models suggest that political parties strategically organize political power in order to

maximize the number of seats they can win in the next election, and thus set their policy positions accordingly. These strategies might include taking positions in order to match voter preferences or to create or maintain an electoral coalition. Because voter or group preferences in these models are largely exogenous, there is little room for groups within the party who seek to persuade their co-partisans. The notable exception is Wolbrecht's theory of issue redefinition, where internal group preferences are responsive to the dominant policy images framing the issue. Positions can shift rapidly when issues are redefined, as the groups in party coalitions change their preferences. Party-aligned think tanks could participate in this issue redefinition process by modifying the dominant policy images shared by their co-partisans.

Extended political network theory and policy-seeking political parties

Recently, scholars studying American political parties have created a new theory of political parties, called extended party network (EPN) theory (Albert 2019; Albert and Barney 2018; Kathleen Bawn et al. 2012; M. Cohen et al. 2009; Desmarais, La Raja, and Kowal 2015; Grossmann and Dominguez 2009; Karol 2009; Koger, Masket, and Noel 2009; Kousser et al. 2015; Manento 2019). EPN theory differs from many of the coalition theories with two key predictions. First, it argues that political parties are not endogenous to office holders, but rather exert significant control over them. EPNs are composed of coalitions of intense policy demanders such as interest groups, networks of individual elites or donors, media or intellectual figures, activists, social movements, and

officeholders. Second, it argues that these actors are driven entirely by policy-seeking goals rather than office-seeking goals.

While scholars had noted the importance of diverse coalitions of elites underlying political parties much earlier (Key 1964; McClosky, Hoffmann, and O'Hara 1960; Schattschneider 1942), EPN theory was developed more recently. Schwartz (1990) first observed in his case study of the Illinois Republican Party a robust network of elites surrounding officeholders who held powerful sway over the party's decision-making process. EPN theory was formalized in a 2012 article by Kathleen Bawn and her colleagues (Bawn et al. 2012). They argue that intense policy demanders form long coalitions, where members of the coalition agree to only support candidates who support most of the policy positions of the coalition as a whole. They intervene in nomination contests to ensure that candidates win who would support the coalition's positions even absent outside pressure. These interventions vary. Party actors may support candidates with campaign donations, connections, endorsements, media attention, volunteers, or by attacking their opponents. Voters are largely absent from this process other than as recipients of the messages from party actors. Bawn et al. theorize that voters have strong policy preferences on only a minority of issues, and therefore rarely constrain the actions of elected officials. Party actors demand that their elected officials maximize policy gains outside of voter awareness but relax those demands when policy can impact elections. These activists and elites are cooperative and deeply connected, forming cohesive and diverse social networks (Albert 2019; Grossmann and Dominguez 2009; Koger, Masket, and Noel 2009, 2010). They argue that direct interventions in general elections

are overly costly for most interest groups and members of the party network, so they often lack the ability to credibly threaten officeholders to change their preferences once in office. Thus, EPN actors intervene in party nominations, where their resources are more effective. Over time, ideologies emerge from the basket of issues that the EPN actors support, rather than from first principles. Once an ideology is established, it creates a largely self-perpetuating system that requires only occasional attention from EPN actors to ensure that their party's officeholders share their values.

Party-aligned think tanks and similar organizations fit in conceptually well as members of extended party networks. However, they rarely intervene directly in nominations. They do not activate grassroots activists or endorse candidates. Rather, they try to influence the policy positions of both members of the extended political party and the officeholders that they nominate. While some intense policy demanders in the extended party network likely have clearly defined interests, others are ideological conservatives or progressives with less defined interests. Information producers can work to define what policy alternatives their co-ideologues should support or oppose or try and harness conservative or progressive instincts in order to convince them to support a particular policy. This role does not fit into the extended party network theoretical framework, although they can work in tandem. However, the role also extends beyond the party nominations mechanism, where information producers will also attempt to influence co-partisans in government to support their preferences. Thus, we need a theory of how information producers can change the preferences of both elected officials and co-members of the extended party network.

MY THEORY OF PARTY POSITIONS.

Information theory and Congress

In order to understand how information producers may influence preferences, I first must review the literature on information and policymaking. Information processing is an essential step in the policy process. Policymakers require information to define, search for and prioritize policy problems, identify and evaluate potential solutions, and ultimately make decisions (Baumgartner and Jones 2015a; Hall and Deardorff 2006; Jones and Baumgartner 2005; Shafran 2015; Workman, Shafran, and Bark 2017). Changes in information can cause rapid and decisive changes in policy preferences (Baumgartner and Jones 2015b; Jones and Baumgartner 2005, 2005; Wolbrecht and Hartney 2014). Information has many mechanisms to change preferences. It controls problem definitions (Workman, Shafran, and Bark 2017). It can reframe problems or solutions, changing the policy image or relative importance of different aspects of it (Baumgartner, De Boef, and Boydston 2008; Baumgartner and Jones 1993; Glazier and Boydston 2012; Rose and Baumgartner 2013; Wolbrecht and Hartney 2014). It can lower the costs of policy change, making it easier for a legislator to act on the policy (Hall and Deardorff 2006). It can alert policymakers or other political actors to new problems or solutions that they were not previously aware of (Baumgartner and Jones 2015b; Wolfe 2012). Finally, policy analysis of various forms can persuade policymakers that problems are more or less severe, or of the relationship between policy outputs and outcomes.

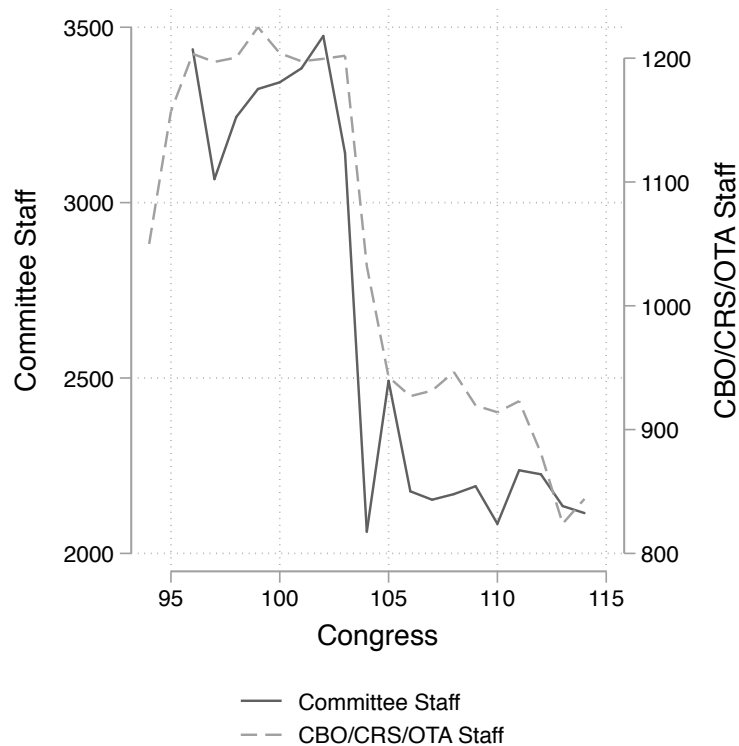
Because information plays a powerful role in determining preferences, changes in the source of information that policymakers draw from can produce different preferences.

Policymakers draw from a broad array of information sources. In private markets, information is scarce and costly, so private actors seek out and purchase only the information that they need. The opposite is true for public policy. Information producers who want to change government preferences produce information and give it away for free to policymakers. As a result, information in the public sphere is oversupplied, often so much that policymakers are unable to attend to all of it at any given time (Jones and Baumgartner 2005). Thus, policymakers must choose which information sources they will attend to, and which to ignore. These choices will have a considerable impact on their preferences.

Congress, the institution which Chapters 5, 6 and 7 focus on, has many sources of information. The first broad group of information sources are those internal to Congress. Staff are the most important internal source (Adler and Wilkerson 2013; Hertel-Fernandez, Mildemberger, and Stokes 2019). Members of Congress with more experienced staff tend to be more productive legislators (McCrain 2018) and tend engage in more analytical discourse in committee hearings (Esterling 2007). Committee staff tend to generate more expertise than personal staff, as they spend more time dealing with policy rather than fielding and addressing constituent concerns (Adler and Wilkerson 2013; Baumgartner and Jones 2015b; Krehbiel 2006). Members have similarly also used legislative service organizations and caucuses to maintain a professional, largely non-partisan staffing base to help process information outside of the committee structure (Ainsworth and Akins 1997). Finally, Congress maintains the non-partisan analytical bureaucracies to provide consistent high-quality information to Congress on a variety of

policy matters. The Congressional Budget Office (CBO) and Joint Committee on Taxation provide budgetary information on legislative proposals, as well as some economic analysis. Congress created the CBO with the Congressional Budget and Impoundment Control Act of 1974 in order to protect their control over the power of the purse from the legislative branch (Binder 2017). The Congressional Research Service (CRS) is Congress' internal think tank, providing detailed legislative advice on a broad range of issues. The Office of Technology (OTA) assessment provided advice to Congress on emerging technology or scientific issues. Finally, the Government Accountability Office (GAO) helps Congress audit and oversee the bureaucracy. As a group, they generally produce high-quality, non-partisan information despite being controlled by an increasingly partisan Congress (Baumgartner and Jones 2015).

However, Congress dramatically cut the budgets of caucuses, legislative service organizations, analytical bureaucracies and committee staff after Republicans regained power in 1995 (Baumgartner and Jones 2015; Curry 2015). Figure 3.1 shows the decline of the committee and legislative support staff. Congressional capacity never returned to its previous equilibrium and suffered further declines after budget cuts when Republicans regained control of Congress in the 2010s.



Source: *Vital Statistics on Congress*. Brookings Institution (2018)

Figure 3.1: Cuts to Congressional Capacity

These cuts to Congressional capacity had a dramatic impact on Congressional operations. Power centralized in chamber leadership, making it more difficult for individual members of Congress and committees to process information independently (Curry 2015). Congress held fewer hearings that focused on problem-solving (Lewallen, Theriault, and Jones 2016). After the cuts, it relied more on assistance from the executive branch to oversee the executive branch (Mills and Selin 2017). In a survey of Congressional staff about the causes of Congressional dysfunction, participants identified “difficulty making evidence-based decisions” and “defining problems logically” as the first and third most important causes.

Congress also relies on executive branch officials in the bureaucracy for information. Executive branch officials develop deep technical knowledge of policy areas through their experience implementing laws (Gailmard and Patty 2012). They help Congress search for, define, and prioritize problems (Workman, Shafran, and Bark 2017). During times of crisis, committees increase their reliance on bureaucratic witnesses in hearings (Shafran 2015). Bureaucrats take an active role in advocating for legislation and are often quite effective at persuading members to follow their advice (Baumgartner et al. 2009; Shobe 2017). They are often assigned as temporary detailees to Congressional committees to assist in oversight (Mills and Selin 2017). They often act independently, forging their own policy changes and establishing some degree of bureaucratic autonomy from Congress (Carpenter 2001).

However, the executive branch will always be a limited information source for the legislative branch. Congress must devote resources to monitoring the executive branch for policy problems (Baumgartner and Jones 2015b; McCubbins and Schwartz 1984). They also attempt to control and constrain the bureaucracy, signaling their policy preferences and priorities in Congressional hearings (Workman 2015). If Congress becomes too reliant on the executive branch, it ultimately risks losing influence in interbranch competition. When the legislative and the executive branch are more likely to disagree, Congress writes laws that provide less discretion to bureaucrats (Huber and Shipan 2002). Thus, increased reliance on the executive branch cannot compensate for lost Congressional capacity.

Because Congressional internal capacity has been reduced, members of Congress increasingly draw information from outside the federal government. These external information providers are most effective at influencing public policy in legislatures by providing legislative subsidies (Hall and Deardorff 2006). Under Hall and Deardorff's model, actors outside of the legislature seek to change public policy. They can either attempt to persuade individual legislators or parties who disagree with them to change their policy preferences, or they can attempt to lower the cost of legislating for allies who already agree with them. Hall and Deardorff argue that lobbyists who follow the latter strategy will be more successful, as persuasion is difficult. While Hall and Deardorff focus on lobbyists, other scholars note that think tanks provide much of the external policy analysis used by Congress (Fagan 2019; McGann 2016; Rich 2005; Stone 1996).

My theory of information and preferences

Actors, either individual officeholders or political parties as a whole, begin with preferences for policy outcomes *ceteris paribus*, hereafter referred to as values. Officeholders have normative conceptions of what is good public policy, what policy problems deserve government attention, or what trade-offs are permissible in the pursuit of their goals. Political parties have similar collective values and core priorities, which we observe as ideology or issue ownership (Egan 2013; Fagan 2019; Noel 2014). Values are relatively stable compared with political incentives and information, having crystallized for the two political parties in the middle of the 20th century and changing only slowly since (Noel 2014). Many values tend to be shared across political parties,

such as patriotism or a desire to represent constituencies. Other values tend to diverge, such as normative beliefs about redistribution of wealth, race or abortion, or the relative priority placed on problems like poverty, discrimination or crime. Actors actualize their preferences for policy outcomes by supporting policy outputs. They prefer policy outputs only as instruments for achieving their goals involving policy outcomes. Absent the other two factors, party preferences for policy outcomes will change only if values change.

Next, the actor's preferences for policy outcomes are modified by electoral, political or career incentives. As with office-seeking theories of individual or party policy positions, elected officials and parties are often motivated by their own re-election concerns (Mayhew 1974), or broader concerns about their party's electoral fortunes (Lee 2016). Elected officials may also change their preferences in order to advance their career within the party. Even if elected officials or parties care deeply about accomplishing policy goals and do not see winning elections or advancing a career in the party as the end in itself, incentives are often instrumental to accomplishing those policy goals. At the same time, many policy preferences will not be strongly influenced by electoral or political incentives. Most issues fly below the radar of most voters (Bawn et al. 2012), who are responsive to the actions of their representatives only when issues are salient and visible (Fagan, Jones, and Wlezien 2017; Mettler 2011; Soroka and Wlezien 2010). Incumbent members of Congress in the age of polarization are increasingly unable to build reputations independent their party, further decreasing the political consequences of policy decisions (Jacobson 2015). Under the Bawn et al. blind spot logic, extended political parties demand that their co-partisans in government only respond to voter

preferences when voters are aware of and will respond to those decisions, and follow policy-seeking goals otherwise.

Problem-solving likely also drives incentives for elected officials. Problem-solving models (Adler and Wilkerson 2013; Jones and Baumgartner 2005) suggest that agendas are largely set by policymakers responding to the most pressing problems at any given time. Policymakers face a complex and diverse problem space at any given time but have limited cognitive and physical resources to attend to those problems. Because their attention is limited, they are forced to ignore most of those problems and deal with a select few important ones. These are often highly salient and thus attract considerable attention from the public. Under these conditions, the public have “double-peaked” policy preferences, meaning they care more about solving the problem than the particular solution used to solve it (Egan 2013). Policymakers have strong incentives to solve the problem, largely to avoid being blamed for failing to solve it (Peter B. Mortensen 2013; Weaver 1986). Because emergent problems often affect the public broadly, problem-solving tends to produce broad bipartisan action (Adler and Wilkerson 2013).

Finally, because actors seek to achieve certain policy outcomes but must use policy outputs to achieve those goals, the actor’s belief about the relationship between policy outputs and outcomes will modify their preferences for policy outputs. The actor’s beliefs about the relationship between outputs and outcomes is created by through consumption of policy analysis. Policy analysis includes beliefs about how effective a policy alternative is at addressing a policy outcome, its secondary consequences or interactions with other policy outcomes or about the baseline objective reality of the

policy outcome such as its severity. While policymakers have preferences for policy outcomes, they do not have direct control over them. They can only enact certain policy outputs intended to have a particular impact on outcomes. If their beliefs about the impact of the policy output on outcomes change, their preferences for the policy output may change. In the real world, we observe wildly different beliefs between the political parties about the impact of different policy outputs on outcomes. Republicans and Democrats disagree on a broad range of issues, ranging from highly salient issues like the impact of greenhouse gas emissions on climate change (Dunlap and Jacques 2013) and the impact of tax cuts on the federal deficit (Jones and Williams 2008) to the impact of urban planning designs on traffic (see DeGood 2019). Policy analysis, which I define as information about the impact of policy outputs on policy outcomes, determines these beliefs. If actors find the policy analysis they consume persuasive, they will adopt its beliefs about the function of policy outputs. However, because information in politics is oversupplied (Jones and Baumgartner 2005), actors are not exposed to all policy analysis, and must first choose which analysis to consume and which to ignore.

Over their long term interactions with knowledge regimes, actors develop general beliefs about how certain types of policy alternatives impact policy outcomes. They use these beliefs as heuristics when evaluating policy alternatives, rather than consulting new policy analysis for each alternative. For example, a conservative Republican might develop the heuristic that free market economic policy tends to produce more economic growth, and therefore assign that belief to all economic policy alternatives presented to her without consulting specific policy analysis on that topic. If they do consult a range of

policy analysis, they might assign more weight to policy analysis with conclusions that support free market economic policies or come from sources that tend to support free market economic policies. Without this heuristic, actors are less likely to find heterodox policy analysis persuasive.

To evaluate the implications of this theory, we might think about a progressive Democratic legislator who cares about decreasing poverty. As a progressive, the legislator believes that decreasing poverty is an important policy outcome deserving immediate government attention. The legislator's district also suffers from higher-than-average rates of poverty, and so she believes that decreasing poverty in her district will increase her chance of reelection, and possibly increase her party's fortunes in the next election overall. Thus, her incentives and values both support enacting policy outputs to decrease poverty before the next election. She is presented with several policy alternatives to decrease poverty, including a direct cash transfer program, an expanded earned income tax, and a labor deregulation bill. After consuming policy analysis on the alternatives, the legislator believes that the labor deregulation bill will have a small impact on poverty but also larger negative consequences on public health, the cash transfer program will have a large impact on poverty but also decrease labor force participation, and the tax rebate will have a moderate impact on poverty without a significant cost to the labor force. She weights these outcomes and decides to support the earned income tax. At the same time, a conservative Republican is considering policy alternatives to address poverty. She also comes from a high-poverty district. Although she cares less about decreasing poverty than her Democratic colleagues, the legislator

believes it is in her political interest to decrease poverty in her district. She is presented with the same policy alternatives but is persuaded by different policy analysis. A report from a trusted Republican-aligned think tank predicts that the deregulatory policy will in fact have a much larger impact on poverty than other policy analysis suggests, while the other policy alternatives will have a higher cost to the federal deficit. Given her preexisting beliefs about free market regulatory policy, the legislator believes the think tank report, and thus supports the deregulatory policy and opposes the other alternatives. Thus, two legislators who are attempting to accomplish the same goal arrive each support and oppose different policy alternatives because they believe in different policy analysis.

Party-aligned think tanks strategies

From existing theories of party positions and my own theory, we can predict several strategies that party-aligned think tanks will employ to influence the policy preferences of their co-partisans. Importantly, these strategies are non-mutually exclusive. Party-aligned think tanks may employ all of them or none at all in different contexts. We can also understand where party-aligned think tanks will be less effective. Unlike many traditional interest groups, party-aligned think tanks have little means to directly influence elections. They do not donate to campaigns, endorse candidates or mobilize voters. Thus, they will be unlikely to engage in purely political strategies such as bringing new voters into an electoral coalition.

The first strategy that party-aligned think tanks could use to influence party positions is reframing. Under Wolbrecht's issue definition theory, party positions change

when the dominant policy images defining how elites view an issue change. Party-aligned think tanks are well-positioned to contribute to issue redefinition. Modern U.S. political parties are closely linked to conservative and progressive ideologies (Noel 2014). Actors see themselves as conservatives or progressives and want to support conservative or progressive policy. However, because these ideologies are largely defined by the basket of issues supported by their extended party network rather than derived from first principles (Bawn et al. 2012), they are often incoherent. Actors compete to define issue positions as the true conservative or progressive position. Because party-aligned think tanks have adopted a formal party organization-like role, they are trusted by large segments of their political party to define which positions a true conservative or progressive should support. Indeed, Rich (2005) found that Republican Congressional staff trusted conservative think tanks more than non-partisan think tanks because they could trust them to reliably support conservative policy. If they engage in framing strategies, we should expect party-aligned think tanks information to primarily work to change the dominant policy images surrounding a policy, rather than persuade the reader that the relationship between outputs and inputs.

The second strategy they may use is activating latent preferences. While party-aligned think tanks are poorly positioned to directly affect electoral politics, they can support their co-partisans in policy debates. Party actors, both government officials and external party representatives, are often called upon to defend their party's position in the public sphere. If the party loses these debates, their positions will become indefensible, and could carry an electoral cost. Party-aligned think tanks can provide the data, reports,

and arguments necessary to win these debates. Rich (2005) calls this type of information “ammunition,” and argues that it allows think tanks to push their allies toward more extreme policy positions. Under his framework, policymakers have values significantly distant from the positions that are defensible in public debates using conventional non-partisan policy analysis. After they receive the necessary ammunition—policy analysis credible enough to field in a public debate—actors can move their position farther toward their latent preferences. If party-aligned think tanks engage in these strategies, we should expect them to produce information that is useful in media debates, such as talking points or quick rebuttals. They should also set their agenda closely to the formal agenda in order to respond quickly to demands for policy information.

Finally, they can engage in strategies to convince their co-partisan elites that their beliefs about the relationship between outputs and outcomes is wrong, and thus they should support different positions. I label these strategies “elite persuasion.” By crowding out other information providers in an oversupplied market and exploiting the heuristics and cognitive biases of their co-partisans, party aligned think tanks are able to use policy analysis to convince their co-partisans to change their preferences. If they are successful, they will be able to co-opt the problem-solving instincts of their co-partisans, who often seek to enact policy outputs to solve problems for their constituents. Their co-partisans change their initial positions from one policy output to the party-aligned think tank’s preferred output. If party-aligned think tanks engage in these strategies, we should expect the conclusions of their policy analysis to support different policy outputs than alternative knowledge regimes.

SUMMARY

This chapter produced a new theory of how policy analysis can impact party position-taking. I first reviewed the literature on party position-taking, finding several explanations for why party positions change. Of these theories, I focused on two where policy analysis and organizations like party-aligned think tanks should be particularly influential: issue redefinition (Wolbrecht 2000) and extended party networks (Bawn et al. 2012). I argued that while these theories suggest some of the mechanisms that information producers in knowledge regimes might use to influence party position-taking, they are insufficient to explain much of party-aligned think tanks behavior. Therefore, we need to extend existing theories to also incorporate this behavior.

Next, I proposed my own theory of position-taking by party actors. Information theory tells us that information about policy can rapidly shift policy preferences, and that the sources that actors draw from matters. At the same time, actors are boundedly rational, and must choose which information to trust and which to ignore. Party-aligned think tanks are able to out-compete rival information sources by exploiting the heuristics and cognitive biases used by their co-partisans. I then proposed that preferences for policy outputs are a function of three factors. The first factor is the actor's values, or actor's preferences for policy outcomes *ceteris paribus*. The second factor is the actor's incentives, external political, career or personal reasons affecting the policy outcome. The third factor is the policy analysis believed by the actor, the underlying beliefs about the relationship between policy outcomes and policy outputs. While previous theories tended to focus on values and incentives as drivers of party position-taking, I focus on policy

analysis. I argue that long-term interactions with knowledge regimes create general beliefs about how policy outputs impact policy outcomes. Actors rely on these general beliefs as a heuristic when evaluating new information. Finally, I use this theory to predict strategies that party-aligned think tanks will use to change their party's preferences. These strategies are reframing, activating latent preferences and elite persuasion.

Chapter 4: Comparative Policy Analysis

In the previous chapter, I argued that party-aligned think tanks could potentially use three mechanisms to change their party's policy preferences. First, they might convince their co-partisans of a different relationship between their desired policy outcomes and policy outputs, thus changing their preferences for policy outputs. Second, they might reframe the policy by emphasizing different underlying aspects of its nature, thus changing the weights that their co-partisans assign to it. Finally, they might activate latent preferences by providing credible arguments that their co-partisans can use in public debates, thus allowing them to take more extreme policy positions.

In this chapter, in order to understand which of these mechanisms party-aligned think tanks use and under what conditions, I examine policy analysis produced by all four party-aligned think tanks. If these think tanks seek to change their co-partisan's beliefs about the relationship between outputs and outcomes, they must produce policy analysis that offers different conclusions about the impact of policy compared with non-partisan sources. If their strategy is to reframe issues, they will accept the conclusions of non-partisan sources, but focus the reader's attention on other aspects of the policy. If their strategy is to activate latent preferences, their policy analysis might do either, but they will also produce shorter talking point-style products. This chapter will examine if and when party-aligned think tanks employ the former two strategies.

The chapter proceeds as follows. In the first section, I discuss the literature on biased information, framing, and think tanks. I also define the concepts of bias in policy

analysis and framing of policy analysis. In the second section, I lay out a research design to study bias and framing in policy analysis from the four party-aligned think tanks. I do so by examining five cases where non-partisans and party-aligned think tanks performed comparable analyses of the impact of a policy on some outcome. In the third section, I examine each case. These include policy analyses of the impact of the American Clean Energy and Security Act's cap and trade system on economic growth, the impact of the Affordable Care and Patient Protection Act of 2010 on the deficit, the impact of renewable portfolio standards on electricity prices, the impact of the 2013 comprehensive immigration reform bill on economic growth and the deficit, and the impact of the Tax Cuts and Jobs Act of 2017 on economic growth. Finally, I conclude. Republican-aligned think tanks are more likely to produce biased information, while Democrats tend to rely on framing. However, there is considerable variation across think tanks. The Center for American Progress and Heritage Foundation are more likely to produce biased information than the American Enterprise Institute and Center on Budget and Policy Priorities.

PARTY-ALIGNED THINK TANKS AND BIASED POLICY ANALYSIS

Bias

If a policy analyst wants to convince a policymaker to change their preferences for policy outputs by persuading them that the output has some different relationship to policy outcomes than she currently believes, the policy analysis must reach different a different conclusion than the policymaker's beliefs. For example, a policymaker might

prefer that her constituents drink clean water, both because she expects to pay an electoral cost if her constituents' water quality decreases and because she values clean water as an important goal for public policy. Under the status quo, she is advised by scientists and government agencies that a nearby mining project she might otherwise support will significantly increase the chances of a pollutant affecting her district's water supply, and so she opposes the policy choice. However, if a rival information source, perhaps one that supports the new project, is able to convince her that the scientists are wrong, and the mine poses only a mild risk of impacting the water supply, she would change her preferences and support the policy change. In chapter 3, I refer to this process of changing policy preferences through policy analysis as *elite persuasion*.

Elite persuasion relies on biased policy analysis. I define biased policy analysis as *policy analysis which materially differs from the scientific or non-partisan consensus in the author's preferred direction*. The policy analysis published by the mine's supporters in the above example is biased because it materially disagrees with the non-partisan consensus in support of the mine supporter's preferred direction. While it is unlikely that they would publish such information, the policy analysis would not be biased if it erred in the opposite direction, e.g. away from the mine supporter's preferences. Party-aligned think tanks, with their ideological missions and patrons, have a clear preference for policy to the left or right of center. Thus, if a Democratic-aligned think tank published a piece of research with conclusions supporting a more progressive conclusion than non-partisan experts, that information would be biased. However, if they published a piece of

research that accepted the conclusions of non-partisans but emphasized the aspects of the issue which appealed to progressive values, it would not be biased.

A number of studies have found that party-aligned think tanks tend to produce biased information. Most of these studies are on climate change. Carbon taxes and emissions trading policies were first developed as a market-based alternative to command-and-control policy designs by bureaucrats in the Environmental Protection Agency under the George H.W. Bush administration to address acid rain (Voß 2007). However, wealthy ideological conservatives such as the Koch brothers, who also happen to own a major oil and gas company, opposed any emissions trading program that targeted greenhouse omissions, and funded think tanks who published research opposing it (Brulle 2014). As a result, Republican-aligned think tanks became the primary source of information questioning climate science. Since the 1970s, over 90% of climate skepticism books were published by conservative think tanks or authors residing at conservative think tanks (Dunlap and Jacques 2013; Jacques, Dunlap, and Freeman 2008). Nearly all conservative think tanks either produced numerous white papers, op-eds, and other material supporting climate skepticism in various forms, or declined to publish research on climate change entirely (Boussalis and Coan 2016). They successfully exploited strong journalistic norms toward balance in political debates by casting disagreements over the facts of climate change as political ones, rather than scientific ones (Bolsen and Shapiro 2018; Boykoff and Boykoff 2004; McCright 2016; McCright and Dunlap 2003). They also spread their biased information throughout the extended party network (Albert 2019). Heterodox scientific researchers would likely have

been less successful at promoting climate skepticism than conservative think tanks, as they had no access to adversarial norms, and would have been expressing opinions outside of their field's consensus.

Although there is less research in other areas, Republican-aligned think tanks have successfully introduced biased information in other policy areas. On tax and budget policy, Republican-aligned think tanks argued extensively that tax cuts reduce long-run deficits, both by growing the economy and through a “starve the beast” mechanism, where governments cut spending in response to high deficits, despite a strong consensus from economists to the contrary (Jones and Williams 2008; Prasad 2018). More generally, Republican-aligned think tanks have elevated heterodox macroeconomic research such as the works of Austrian School economist Friedrich Hayek, a prominent critic of Keynesian economics and supporter of libertarian economic policies (Backhouse 2005). Using Austrian arguments about fiscal and monetary policy during recessions, Republican-aligned think tanks argued that any increased government spending during the 2008-2009 financial crisis would have no impact on GDP (Watkins and Tyrrell 2009), despite strong predictions from most economists that increased government spending could make up for decreased aggregate demand (for example, see (IMF Fiscal Monitor Update 2012)).

On welfare policy, Republican-aligned think tanks subsidized studies finding that racial inequality was caused by hereditary differences in intelligence, rather than public policy, discrimination or other environmental factors (Medvetz 2014). The most notable of these is Charles Murray, a prominent conservative political scientist who wrote *Losing*

Ground and *The Bell Curve* while working at the Manhattan Institute and American Enterprise Institute. *Losing Ground* claimed that social welfare programs on net hurt the poor. *The Bell Curve* claimed that racial differences in income and education achievement were caused by hereditary differences in general intelligence, rather than environmental factors. Murray's work formed the intellectual foundation of the conservative campaign to cut U.S. welfare spending in the 1990s (Medvetz 2014; O'Connor 2001). However, the core claims of the work were quickly rejected by social scientists (Devlin 1997; Heckman 1995). If Murray were a practicing social scientist engaging with his colleagues in a debate, his work would have lost its relevance long ago as a consensus formed that the weight of the evidence and repeated inquiries suggested it did not accurately describe reality. However, Republican-aligned think tanks continue to support his work and promote it to policymakers. Murray currently holds the Hayek Emeritus Chair at the American Enterprise Institute. In January 2020, he published a new book, *Human Diversity: The Biology of Gender, Race and Class*.

There is little research assessing the nature of policy analysis produced by Democratic-aligned think tanks. Grossmann and Hopkins (2016) find that reports from progressive think tanks tend to include more citations, be authored by better-educated researchers, and are more likely to analyze original data. They argue that the difference in research quality is caused by differences in Republican and Democratic values, but do not examine individual reports or claims. Given their technocratic traditions (see Chapter 2), we should expect Democratic-aligned think tanks to generally produce information that is more in line with the scientific consensus. However, the Center for American Progress,

which was created in response to perceived over-reliance by Democrats on technocrats, should be more likely to produce biased information than the Center on Budget and Policy Priorities, which was very much created in the technocratic tradition before Democrats sought an alternative knowledge regime.

Framing

If a policy analyst wants to convince a policymaker to change their preferences by focusing on a different aspect of the policy, rather than different conclusions, they must reframe it. I define framing as an attempt to change the dominant aspects of the policy's issue definition. Policy analysts will attempt to shift the dominant aspects of issue definitions toward aspects that are more favorable to their preferences using policy analysis. For example, in the mining and pollutants example above, a policy analyst might argue that even though there is a risk of pollution from mining, the new mine will provide many new well-paying jobs for the community. Thus, even if the policymaker believes that the new mine may threaten the quality of her constituent's drinking water, they might still support the project as a means of generating economic activity if they value the latter outcome over the former.

There is little research on party-aligned think tanks and framing specifically, but considerable research on the role that political parties and interest groups play in framing issues. Baumgartner and Jones (1993) find that changes in dominant policy images can break down the institutional legitimacy of policy subsystems, creating rapid and dramatic change in public policy. Changing media frames can also cause macropolitical actors

such as legislatures to change their preferences (Baumgartner, De Boef, and Boydston 2008; Rose and Baumgartner 2013). In political parties, changing the dominant issue definition can affect how elites in party coalitions weigh impacts of policy alternatives (Wolbrecht and Hartney 2014). Interest groups understand the importance of framing in determining policy outcomes, and thus attempt to reframe issues (Klüver and Mahoney 2015). However, they are rarely successful; Baumgartner et al. (2009) found that lobbyists successfully reframed issues only about 5% of the time. However, for the same reasons discussed in Chapter 3, party-aligned interest groups may be more successful at reframing issues when compared with other groups. As representatives of the broad party coalition afforded a privileged party organization-like role, they help define what it means to be conservative or progressive. Thus, they are better positioned to persuade their co-partisans that certain aspects of the policy should be more salient than others. In the mining example, a Democratic-aligned think tank might argue that a true progressive should care about the health of the policymaker's constituents, rather than its impact on the local economy. Thus, a Democrat who sees themselves as progressive might increase the value, they place upon the public health consequences of the policy output after reading the report from their trusted think tank.

RESEARCH DESIGN

For the purposes of this chapter, I assume that predictions by well-respected non-partisan sources represent the best possible scientific estimate given the information available at the time. Estimates are biased when they are both more conservative or

liberal than the conclusions of non-partisan sources and the discrepancy is in the preferred direction of the organization that published it. I collected information produced by party-aligned think tanks and non-partisan information sources across a range of issues and compare their claims. I hypothesize that Democrats and Republicans will tend to produce information biased to the left or right of the non-partisan sources. However, Republican bias will be farther to the right than Democratic bias is to the left due to stronger Republican rejection of the technocratic knowledge regime.

One problem that arises with this research design is comparability. Researchers often make claims about policy that conflict, but they also ask slightly different questions. One report may ask about the efficacy of a specific plan to affect some outcome, while another may ask about the general efficacy of a policy option but not focus on specifics. Because reports often are based on different assumptions, it can be difficult to perform apples-to-apples comparisons between them. In a deep qualitative design, a researcher with subject-matter expertise could thoroughly document the claims made by both party-aligned think tanks and non-partisan experts and assess if the party-aligned think tank information is biased to the left or right of non-partisans. However, such deep qualitative work is beyond the scope of this project. Rather, we can solve this problem using impact analyses. An impact analysis is an estimation by the information producer of an outcome, such as the effect of a policy on GDP, the deficit, unemployment, or some other output. If multiple information sources estimate the effect of the policy on the same output, we can make valid comparisons between the estimates. If information is biased, it will produce a more favorable result for its supporter's party.

If it is unbiased, it will be similar to the result produced by non-partisan information sources.

Unfortunately, it is rare that a range of think tanks and non-partisan sources will produce apples-to-apples impact analyses of a policy output. Non-partisan information providers such as the Congressional Budget Office evaluate specific bills normally after they have emerged from committee. Outside information sources such as think tanks tend to produce policy analysis at the early stages of the policy process, before policy proposals are precisely defined (Mooney 1991). Often, party-aligned think tanks will produce a report on the impact of some proposed policy, but the proposal never advances far enough to garner attention from non-partisan providers. At other times, the proposal does advance, but the details change in between when the early report was issued and when the estimates produced by other sources. Because these factors rarely line up sufficiently to allow for comparison, this research design limits generalizability to information produced on policy that attracts the attention of multiple information producers over a short time period.

In order to collect a sample of impact analyses to examine, I searched for common predictions among reports issued by party-aligned think tanks and non-partisan information sources. I first searched each party-aligned think tank website using the search terms, “impact” and “cost estimate” to identify a universe of possible reports that conducted impact analyses. Because these rely on internet searches, I limited the time period to reports published after 2009. I then read each report and determined if it produced an independent quantitative estimate of the impact of policy on some variable.

Next, I identified non-partisan estimates of the same impact, both using internet searches and by following the citations of the party-aligned reports. For non-partisan information sources, I collected information from non-partisan think tanks, government agencies, and academics.

Finally, I extracted data on the common impact predictions offered by each set of reports. All reports modeled more than one outcome. Some of these were unrelated, such as the impact of a renewable energy standard on public health and electricity prices, while others were related, such as the impact of a tax cut on economic growth and therefore its impact on net tax revenues. Where estimates were unrelated, I collected all common impact estimates. Where they were related, I collected only the base estimate that others were based upon. In some cases, reports estimated the same impact in different units, such as estimating impact in terms of annualized or cumulative economic growth. In these cases, I converted the estimates to a common unit.

Two broad types of analyses emerged from these cases: primary and secondary analyses. Think tanks often performed their own primary analysis to predict the impact of a policy on some outcome. These analyses often require complex models and considerable expertise to set parameters and perform a credible estimate. Some think tanks retain this expertise in house, such as the Heritage Foundation's Center for Data Analysis, which produced several of the reports analyzed below. Others contracted with outside firms or academics to produce a report to be released under the think tank's brand, such as the Center for American Progress' report on the impact of the Affordable Care Act on the deficit. However, many think tank reports on the impact of a policy are

themselves re-analyses of primary research. These secondary reports often accept the finding of the independent analysis it references, but also examine different aspects of the policy, such as how its impact differs across income distributions or geographies. In other cases, secondary reports modify the assumptions of the independent report they are referencing, creating a different estimate than the original source. For each case, I noted whether the report was a primary or secondary impact analysis.

This search yielded 30 reports across five issues, which are displayed in Table 4.1. As they attracted the attention of multiple organizations over a short period of time, these issues comprise nearly all of the biggest partisan conflicts over policy during the Obama and Trump eras.³¹ These were the debate over the impact of the Affordable Care and Patient Protection act on the deficit, the impact of the cap and trade system proposed under the American Clean Energy and Security Act on long-term economic growth, the impact of a renewable energy standard on electricity prices, the impact of the 2013 comprehensive immigration reform bill on the deficit, and the impact of the Tax Cuts and Jobs Act of 2017 on economic growth. These issues represent five different policy areas—tax, environmental, energy, immigration and health care policy—across eight years. However, they represent a smaller cross section of outputs, focusing on cost, impact on growth, and impact on electricity prices. In the next section, I examine each issue individually.

³¹ A notable exception is the debate over the repeal of the Affordable Care Act in 2017. While all four party-aligned think tanks released numerous reports and briefs on the issue, including criticisms of policy analysis performed by the Congressional Budget Office, none published their own impact analyses.

Policy	Impact On?	Time	Dem.	Non.	Rep.
American Clean Energy and Security Act	GDP	2009	2	4	2
Renewable Energy Standard	Electricity Cost	2009-2012	2	1	2
Affordable Care and Patient Protection Act	Deficit	2009-2010	2	2	2
Comprehensive Immigration Reform	Deficit	2013	1	1	1
Tax Cuts and Jobs Act	GDP	2017	1	4	2

Table 4.1: Impact Analyses Used in this Chapter

COMPARATIVE POLICY ANALYSIS CASE STUDIES

American Clean Energy and Security Act of 2009

The American Clean Energy and Security Act (ACES), would have implemented a federal cap and trade system for greenhouse gas emissions. It would have required that U.S. emissions decrease by 3% relative to 2005 levels beginning in 2012, slowly decreasing to 83% by 2050. The bill used an emissions trading system, where companies could bid on permits to emit carbon dioxide and trade those permits on an open market. The bill would have directed revenue from permit sales into subsidies for clean energy, carbon sequestration, and other technology. ACES passed the House of Representatives 219-212, with just 8 Republicans supporting it, but did not receive a vote in the Senate. It was the last major anti-climate change legislative to significantly advance in the U.S. Congressional legislative process.

One of the key policy debates for analysts on ACES was the impact of its cap-and-trade system on the economy. A cap-and-trade system sets hard limits on the amount

of greenhouse gases that can be emitted in a given year and relies on market forces to either reduce energy use or find alternative clean energy sources. If the economy develops cheap and available substitutes for carbon-burning energy, the cap should have a relatively small impact on the economy. If it does not, high energy prices could decrease economic activity. Thus, several analysts estimated the impact of the ACES cap-and-trade system on long-run real GDP.

Seven sources produced impact analyses of the impact of the ACES Act on GDP in 2030, five of which were independent analyses and three of which were secondary (see Table 4.2). Four of these sources were non-partisan.³² The first, published by a group of scientists at the MIT Joint Program on the Science and Policy of Global Change led by Sergey Paltsev (Paltsev et al. 2009), used the center's Emissions Predictions and Policy Analysis (EPPA) model to estimate the impact of a number of climate policy alternatives on the economy, including ACES. Palstev and his coauthors expected ACES to have a relatively small impact on the economy, with 2030 GDP being only 0.37% smaller than the counterfactual of no policy change. Two government agencies also produced detailed reports. The first was published by the Energy Information Agency (EIA), the Department of Energy's policy analysis organization (EIA 2009). The second was published by the Environmental Protection Agency (EPA 2009)(EPA 2009). The agencies were split as to the bill's impact; EIA estimated that GDP would be 0.30% lower, similar to the Palstev estimate, while the EPA estimated it would be 0.90% lower.

³² Two additional independent non-partisan estimates of the bill's impact on the economy was produced by the Brookings Institution and Congressional Budget Office. However, neither report specifically predicted the impact of the report on 2030 GDP, so they are not included below.

Both the Center for American Progress and Center on Budget Policy Priorities produced secondary reports analyzing the impact of cap and trade. The CAP report summarized seven estimates of the impact of both the ACES cap and trade system and estimates of a similar bill proposed during the previous Congress (Pollin, Heintz, and Garrett-Peltier 2009). CAP noted that the EPA report represented the worst-case scenario, and even then, decreased annualized economic growth by just 0.05%. They also emphasized benefits of spending on renewable energy, arguing that any cap and trade system paired with large increases in public spending on renewable energy would have a net positive impact on growth. CBPP's report also accepted the EPA's analysis as credible and accurate but emphasized that the estimate did include the economic benefits of decreasing the risk of climate-related catastrophic environmental and economic effects (Stone 2009). Thus, both Democratic-aligned think tanks declined to produce biased estimates, and instead focused on a progressive framing of the policy analysis.

The two Republican-aligned think tanks published very different information on the impact of ACES. The Heritage Foundation commissioned a primary analysis from IHS Global Insight, an economics consulting firm (Beach et al. 2009). They projected that additional renewable energy capacity would not increase versus the counterfactual despite the price on carbon. Instead, electricity and transportation prices would rise in response to the cap on carbon emissions by as much as 90%. This increased price would decrease economic activity. They projected that 2030 GDP would be 2.31% lower than the counterfactual where no policy changed. Conversely, the American Enterprise Institute did not produce a primary analysis, or even a substantial report specifically

dedicated to the bill. However, AEI did produce commentary on ACES from Lee Lane, head of the organization's geoenvironmental program. While much of his commentary focused on the challenges of a cap and trade strategy in reducing greenhouse gas emissions given international collective actions problems, Lane commented on economic growth in one article titled, "What will the climate bill cost?" (Lane 2009), in which he criticizes non-partisan reports for being too optimistic about costs. Lane refers to a study by Charles Rivers Associates, an energy consulting firm, which projects 2030 GDP to decrease by 1%. Thus, the Heritage Foundation report created a primary estimate biased far to the right of non-partisans, while the AEI commentary produced a secondary report slightly to the right of the non-partisans, but largely focused on reframing.

These predictions are summarized in Table 4.2. The non-partisan sources predicted that the cap and trade program proposed under ACES would decrease GDP in 2030 by between 0.3% and 0.9%. Neither Democratic-aligned think tank produced their own primary estimate of the impact of cap-and-trade, and accepted the EPA's estimate, which was considerably more negative than even the other non-partisan sources, as the authoritative word on the bill's impact. However, both think tanks also engaged in some mild reframing of the cost/benefit calculus offered by the EPA report. On the other side, both Republican aligned think tanks offered their own estimates on the impact of the bill. The Heritage Foundation's secondary report was strongly biased to the right, estimating that GDP in 2030 would be 2.3% lower than the counterfactual. AEI provided only secondary analysis, referring to a third-party report by an energy consulting firm that estimated only a slightly larger impact on GDP than the EPA report, although AEI's

framing deemphasized the environmental benefit of decreasing greenhouse gas emissions and strongly emphasized its economic impact.

	Organization	GDP (2030)	Type
<i>Democratic</i>			
	Center for American Progress ¹	-0.9%	Secondary
	Center on Budget and Policy Priorities ²	-0.9%	Secondary
<i>Non-Partisan</i>			
	Palstev et al. 2009	-0.4%	Primary
	Energy Information Agency	-0.3%	Primary
	Environmental Protection Agency	-0.9%	Primary
<i>Republican</i>			
	Heritage Foundation	-2.3%	Primary
	American Enterprise Institute ³	-1.0%	Secondary

1. The Center for American Progress report uses both the EPA and Palstev et al. estimates

2. The Center on Budget and Policy Priorities report references the EPA estimates.

3. The American Enterprise Institute report references predictions from a report by Charles Rivers Associates, an energy consulting firm.

Table 4.2: Analyses of the Effect of the American Clean Energy and Security Act on GDP in 2030

Affordable Care and Patient Protection Act of 2010

The Affordable Care and Patient Protection Act of 2010 (ACA) was the signature legislative achievement of the Obama Administration. The ACA was the culmination of decades of advocacy by progressives to bring near-universal health care coverage to Americans (Hacker 2010). It resulted in between 24 and 26 million Americans receiving health insurance. 15 million received health insurance through an expansion of Medicaid above the poverty line and 10 million through subsidies that allowed working class families to purchase health insurance on publicly run individual exchanges (CBO 2016). The bill also created numerous consumer protections for Americans buying health

insurance. Most notably, it prohibited insurance companies from denying coverage to Americans with pre-existing conditions, only allowed them to vary premiums by age and location, banned lifetime caps on health insurance coverage and required insurers to spend a certain percentage of premiums on coverage (Meltzer 2011). Furthermore, the bill sought to “bend the cost curve” of American health insurance through a number of regulatory measures. These included a mandate that all individuals carry health insurance, changes to how the federal government pays providers and incentives to increase preventative care and vaccinations. It paid for these changes largely by increasing Medicare payroll taxes by 0.9% and 3.8% on investment income for wealthy households, as well as cuts to federal Medicare spending (CBO 2010). The bill also included a significant change to federal student loan financing under the Higher Education Act of 1965 that was unrelated to health care. The analyses below only consider the health care portion of the ACA.

The biggest policy analysis debate surrounding the ACA was its cost. The policy analysis debate centered around the cost of new government spending on health care, rather than the impact of the taxes. All but one of the reports agreed that the ACA would raise \$420 billion in new tax revenue and cut \$511 billion in federal spending, primarily to Medicare. Analysts disagree on both the impact of new regulations on overall health care costs and how much the complex regime of subsidies and Medicaid expansion would cost. Two non-partisan sources modeled the impact of the ACA on the deficit. The Congressional Budget Office estimated that the ACA would increase government spending by \$730 billion. It would spend \$358 billion on subsidies to the individual

marketplaces and \$434 billion from the Medicaid expansion. Thus, the bill would decrease the deficit by \$124 billion over the 10-year budget window (CBO 2010). The RAND Corporation also released its own independent estimate, using its in-house COMPARE simulation model (RAND 2010). RAND estimated that government spending on health care would increase by \$899 billion. RAND's model assumed that plans on the individual market would cost considerably more than CBO's estimate, thus increasing the cost of federal subsidies and slightly increasing taxes paid by non-compliant individuals. It also estimated slightly different spending costs. RAND estimated that subsidies would cost the federal government \$499 billion. However, it also estimated a slightly lower cost of the federal Medicaid expansion at \$400 billion. Thus, while RAND did not estimate the revenue side of the occasion, its estimates on federal spending imply that the bill would decrease the deficit by \$32 billion.

Both Republican-aligned think tanks produced reports estimating the impact of the ACA on the deficit. The AEI report was written by Scott Harrington, a respected professor of insurance and risk management with an endowed chair at the Wharton School who also held an affiliation with AEI (Harrington 2010). The report summarized and deferred to the CBO estimates of the bill's impact on health care spending and the deficit. He argued that the cuts to Medicare would likely have to be revisited or reversed by a future Congress, and that the same problems could have been solved with free-market policy alternatives contained in the 2008 Republican Party Platform. The Heritage Foundation, on the other hand, created its own primary estimate by modifying the assumptions used by CBO to determine the bill's "real" cost (Capretta 2010). The report

argued that the CBO's estimated double-counted many of the spending cuts contained in the bill, and expected Congress to continue to raise Medicare and Medicaid payments to providers (known as the "Doc Fix"). It concluded that the true cost of the spending provisions in the House version of the bill³³ would be \$1.495 trillion, implying that it would increase the deficit by \$564 billion.

Both Democratic-aligned think tanks also issued reports. The Center on Budget and Policy Priorities published three secondary analyses on the impact of the ACA on the deficit, all of which referred to the CBO estimate (Lueck et al. 2010; Van De Water 2010; Van De Water and Horney 2010). The reports framed the ACA as a victory for working- and middle-class families who struggle with health care costs, but also one that would bend the cost curve on health care and improve the federal government's long-term budget outlook. The Center for American Progress, on the other hand, performed its own primary analysis of the impact of the ACA on the deficit which it co-published with the Commonwealth Fund (Cutler, Davis, and Stremikis 2010). The primary author, David Cutler, is an endowed chair in economics at Harvard University who had advised numerous Democratic presidents and presidential campaigns on health care issues. The report argued that the ACA would actually decrease the deficit by \$505 billion from the health care provisions of the bill,³⁴ largely due to the bill's payments, modernization and regulatory reforms. Specifically, it estimates that the federal savings from the Medicare

³³ The Heritage report was released on January 16th, 2010, before the final reconciled version of the bill was available.

³⁴ Because the report uses the CBO's report on the full bill, including the education provisions, it estimates savings of \$524 billion. I subtracted the CBO's \$19 billion savings from the education provisions from their estimate.

payments cuts would be \$171 billion greater than CBO's \$511 billion estimate, the reforms would decrease the growth of Medicare costs by \$124 billion, and lowered private health care costs would result in employers shifting compensation from tax-free health insurance to taxed wages, resulting in an additional \$86 billion federal revenue. The report argues that the inefficiencies in health care systems when compared with our private sector industries create enough slack for the federal reforms to target and reduce costs.

These predictions are summarized in Table 4.3 The non-partisan sources predicted that the ACA would decrease the federal deficit by between \$32 billion and \$124 billion over 10 years. The CBO and RAND corporation both forecast that almost all of the savings in the bill would come from relatively straightforward tax increases and direct cuts to federal spending. The two centrist-leaning party-aligned think tanks, AEI and CBPP, both accepted this assessment with the barest reframing. However, CAP and Heritage each issued reports that were biased in their preferred direction in similar magnitudes. CAP predicted that the payment and regulatory reforms in the ACA would decrease the bill's cost, saving an additional \$381 billion. Heritage predicted that many of the cuts would fail to materialize in actual spending due to "double-counting" and anticipated payment policy changes, and it would actually cost \$524 billion more than the CBO estimate.

	Organization	Deficit	Type
<i>Democratic</i>	Center for American Progress	\$-505 billion	Primary
	Center on Budget and Policy Priorities ¹	\$-124 billion	Secondary
<i>Non-Partisan</i>	Congressional Budget Office	\$-124 billion	Primary
	RAND Corporation ²	\$-32 billion	Primary
<i>Republican</i>	Heritage Foundation	\$400 billion	Primary
	American Enterprise Institute ³	\$-124 billion	Secondary

1. The Center on Budget and Policy Priorities report references the CBO report.

2. The RAND Corporation report only estimates the cost of the ACA's spending. I calculated the impact on the deficit using the CBO's tax revenue estimates.

3. The American Enterprise Institute report references the CBO report.

Table 4.3: Analyses of the Effect of the Affordable Care and Patient Protection Act on the Deficit

Clean Energy Portfolio Standards

In addition to a cap and trade system, the American Clean Energy and Security Act included a federal requirement that utility companies generate a gradually increasing proportion of their electricity output using renewable energy. Beginning in the late-1990s, 29 states adopted renewable energy portfolio standards, including several Republican-controlled states like Texas (Barbose 2018). Roughly half of the growth of new renewable energy capacity since 2000 can be attributed to state RPS laws (Barbose 2018). In addition to reducing carbon emissions, state RPS policies also considerably reduced other types of harmful air pollution, such as sulfur dioxide (SO₂) and nitrogen dioxide (NO₂) (Mai et al. 2016). After ACES failed to pass the Senate, the climate change debate shifted to a federal RPS law independent of a cap and trade system. Because the RPS laws were popular and effective in both blue and red states, advocates were

optimistic about its prospects in Congress. Republican Senators like Lindsey Graham and Sam Brownback signaled support for a RPS during the 112th Congress (Howell 2010).

The most advanced RPS proposal in the Senate was the Clean Energy Standard Act of 2012 (CES), which was introduced by Democratic Senator Jeff Bingaman. CES would require electric utilities to generate 24% of their electricity from clean sources beginning in 2015, slowly increasing to 54% by 2025 and 84% by 2035. It would have set up a credit-trading scheme allowing states with less access to cheap solar or wind power to pay states with better access to over-produce clean electricity and make up for their shortfall (Ye 2012). Carbon emissions from electricity generation in 2035 would drop to 60% of 2010 levels. However, although a similar bill was bipartisan during the 111th Congress, no Republicans joined Democrats in cosponsoring CES in the 112th. It never received a vote.

Similar to the debate over cap and trade, the policy analysis debate over the portfolio standards contained in CES centered around the ability of utility companies to adjust to a post-coal paradigm. If utilities could generate clean electricity cheaply, there would be a relatively small impact on electricity prices. If they could not, prices would increase under constrained electricity supply. These prices would be paid by retail consumers and businesses, resulting in loss of household income and potentially lower economic growth. Unlike the cap and trade estimates, analysts could use data from the 29 states who adopted renewable energy portfolio standards to estimate the impact of a federal standard on prices. Because the law phased in electricity prices over time, analysts predicted the impact of the policy change at different time intervals.

The Energy Information Agency (EIA), a Department of Energy policy advisory organization, performed a detailed analysis of the impact of CES (EIA 2012). EIA estimated that the 54% requirement in 2025 would increase average retail electricity prices from \$0.0929/kWh to \$0.0965/kWh, a 4% increase. In 2035, the impact would be stronger, shifting prices from \$0.0954/kWh to \$0.1129/kWh, an 18% increase. CBO also published an extensive report on various clean or renewable portfolio standards in 2011, but only estimated the impact of a more modest 25% clean energy standard (CBO 2011).

On the Democratic side, just the Center for American Progress published a report estimating the impact of CES on electricity prices (Caperton 2012). Borrowing a method from Hickey and Carlson (2010), the CAP report examined the difference in electricity prices before and after states implemented a renewable energy standard. It found that, on average, state electricity prices did not increase following the introduction of a portfolio standard. Therefore, the report concluded, consumers should not expect any net increase in electricity prices from CES or similar laws. The report's conclusions differ from the EIA report because it ignored the size of the standards. While many states implemented portfolio standards, none at the time had approached the ambitious thresholds that the CES would require. The Center on Budget and Policy Priorities did not produce a report on renewable portfolio standards.

Both the Heritage Foundation and American Enterprise Institute produced reports skeptical of RPS standards, but for different reasons. During the 111th Congress, Heritage published a report on renewable portfolio standards in response to the requirements included in the ACES bill (Kreutzer et al. 2010). The Heritage report assumed that

utilities would have to substitute coal electricity generation for wind and solar at current costs to comply with any portfolio standard, rather than the cost coming down with technological change or scale. Coal cost \$78/mWh and natural gas cost \$140/mWh, while onshore wind cost \$149/mWh and photo-voltaic solar electricity cost \$396/mWh.³⁵ The report calculated that shifting from coal and natural gas to renewable energy would increase electricity prices by 22.5% in 2025 and 36% in 2035, dramatically increasing household costs by \$189 per month in 2035. AEI, on the other hand, accepted the EIA data (Zycher 2012). Zycher instead argued that recent changes in natural gas extraction technology will make renewables less competitive, especially as they attempt to scale up. He also emphasized the long-term negative impact that higher energy prices would have on the economy, and deemphasized the potential risks associated with climate change.

Table 4.4 summarizes these predictions. The Energy Information Agency predicted that real retail electricity prices would increase under a renewable energy portfolio standard by 4% in 2025 and 18% in 2035, as utility companies adapted to the changing environment by switching from lower-cost coal to higher-cost renewable energy sources. The American Enterprise Institute published a secondary analysis which largely accepted this finding with some reframing, while the Center on Budget and Policy Priorities did not issue a report on the topic. The Center for American Progress published a report which argued that there should be no short-term increases in electricity prices

³⁵ These rates refer to the estimated levelized cost per megawatt hour for new capacity as estimated by U.S. Energy Information Administration, “2016 Levelized Cost of New Generation Resources from the Annual Energy Outlook 2010. Today, EIA estimates that new capacity for photovoltaic and onshore wind in 2023 at \$49/mWh and \$43/mWh (EIA 2020).

under a renewable portfolio standard, although they did not predict the impact of one on long-term prices. This short-term prediction is slightly to the left of the EIA’s prediction of a 4% increase. However, we might also consider the report’s omission of a longer-term prediction to be biased in and of itself, since EIA predicted a significant 18% price increase in 2035, as the RPS became more constraining on utility companies, while CAP ignored the more stringent standards of the federal bill relative to state standards. The Heritage Foundation, on the other hand, aggressively predicted that prices would rise by 22.5% in 2025, nearly four times as much as the non-partisan sources, and 36% in 2035. The short-term prediction is biased much farther to the right than CAP’s is to the left. However, the long-term prediction is arguably equally biased if we interpret CAP’s silence on long-term prices as a prediction of zero change.

Organization	Prices (2025)	Prices (2035)	Type
<i>Democratic</i>			
Center for American Progress	0	n/a	Primary
Center on Budget and Policy Priorities ²	n/a	n/a	n/a
<i>Non-Partisan</i> ¹			
Energy Information Agency	4.0%	18.0%	Primary
<i>Republican</i>			
Heritage Foundation	22.5% ³	36%	Primary
American Enterprise Institute ⁴	4.0%	18%	Secondary

1. The Congressional Budget Office released an extensive report on the impact of renewable energy standards, but their analysis was based on the EIA analysis.
2. The Center on Budget and Policy Priorities did not issue an impact analysis of renewable energy standards.
3. The Heritage Foundation's report released estimates for 2012 and 2035, as well as cumulative impacts in between. The 22.5% figure is interpolated.
4. AEI based its analysis off the Energy Information Agency report.

Table 4.4: Analyses of the Impact of Proposed Renewable Energy Portfolio Standards on Electricity Prices

Border Security, Economic Opportunity and Immigration Modernization Act of 2013

After the 2012 election, the Republican National Committee wrote a report diagnosing the party's loss in the election and examining its long-term electoral prospects. The report concluded that the Republican Party needed to embrace immigration reform in order to be successful in the long term,

“If Hispanic Americans perceive that a GOP nominee or candidate does not want them in the United States (i.e. self-deportation), they will not pay attention to our next sentence. It does not matter what we say about education, jobs or the economy; if Hispanics think we do not want them here, they will close their ears to our policies. In the last election, Governor Romney received just 27 percent of the Hispanic vote. Other minority communities, including Asian and Pacific Islander Americans, also view the Party as unwelcoming. President Bush got 44 percent of the Asian vote in 2004; our presidential nominee received only 26 percent in 2012...

... We are not a policy committee, but among the steps Republicans take in the Hispanic community and beyond, we must embrace and champion comprehensive immigration reform.” (RNC 2013, 8)

The Border Security, Economic Opportunity and Immigration Modernization Act of 2013 (hereafter referred to as “the immigration bill.”) was an attempt to enact the policy change recommended by the RNC report. The bill was structured as a compromise between the pro and anti-immigration sides of the debate. For pro-immigration proponents, the bill would have allowed most undocumented immigrants in the United States who came to the country before 2012 to pay a \$500 penalty and become permanent residents and eventually citizens. It also provided an easier path to citizenship for undocumented immigrants who were brought to the United States as children. For the anti-immigration side, it would provide large increases in funding for border security, with the goal of intercepting 90% of crossings on the Southern border. It would implement a national E-Verify system to prevent undocumented immigrants from legally

working. Many of the policy changes affecting undocumented immigrants would not go into place until after the Southern border targets were met. Finally, the bill also made a number of important changes to the legal immigration system with support from both sides, including replacing country-based quotas with a Canadian-style merit system and increasing employment-based visas for high-skilled immigrants.

The immigration bill was bipartisan. It was introduced to the Senate by a “Gang of Eight” Senators, including Republican Senators McCain, Graham, Rubio and Flake in April of 2013. The bill was supported by a number of key interest groups, most notably the U.S. Chamber of Commerce (U.S. Chamber of Commerce 2013). It quickly moved through the Judiciary Committee and passed the full Senate on a 68-32 vote in late-June. All Democrats and fourteen Republicans voted in aye. However, the bill received intense opposition from ideological conservatives. In particular, Rush Limbaugh, an influential conservative talk radio host, argued relentlessly against it on grounds that it would hurt Republicans at the ballot box,

“But regardless, whenever they get the vote, if it’s 10 years, if it’s two hours, if it’s five years, if there are 11, 12 million people here currently unable to vote, and they are Hispanic, and if they fit the profile that polling data gives us, a full 70% of them are gonna vote Democrats. So the numbers work out this way. If you got 11 or 12 million people here that can’t vote right now, not legally, but someday will be able to, and 70% of those people are gonna vote Democrat, how in the world does the Republican Party stay — I hate using this word ‘cause it’s used incorrectly, but viable, how does the Republican Party stay viable, when they get 30% of whatever that number of millions of new people is?” (Limbaugh 2013)

Two related policy analysis debates emerged from contentious parts of the bill. First, analysts asked what impact legitimizing tens of millions of undocumented

immigrants and eventually granting them citizenship would have on economic growth. Relatedly, analysts also asked what impact the bill would have on the deficit. The impacts of changes to legal immigration and increased enforcement were not the subject of partisan debate.

Unfortunately, the complex nature of the immigration bill resulted in organizations estimating its impact on slightly different outputs (for a detailed comparison, see (Enchautegui, Lindner, and Poethig 2013). Three organizations produced independent estimates of the impact of the changes in immigration law on the economy and deficit. However, each estimated slightly different impacts of the bill on slightly different outcomes. The Congressional Budget Office estimated the impact of the individual components of the bill on economic growth and the impact of the total bill, including its large changes to legal immigration and new spending on border security, on the deficit over the 10-year budget window. It also provided a brief estimate of the bill's impacts on the deficit in following decade. The two party-aligned think tanks that produced independent estimates, the Center for American Progress and Heritage Foundation, wrote reports on the impact of the portion of the bill that legitimized, and eventually granted citizenship to, undocumented immigrants (Lynch and Oakford 2013; Richwine and Rector 2013). The CAP report estimated both the impact of legalizing undocumented immigrants on both GDP and tax revenue over the 10-year budget window, while the Heritage report estimated the impact of doing so on the deficit over 50 years, although they also estimated the impact over the first 13 years. While I perform the best possible apples-to-apples comparisons below, these comparisons are not how the

reports were received (Enchautegui, Lindner, and Poethig 2013). In particular, the Heritage report was reported contemporaneously as a cost estimate of the bill, comparable to the CBO report (Palmer and Vogel 2013), and thus likely impacted the debate over the bill as if it were an apples-to-apples comparison. While these estimates are comparable to some degree, due to their complexity I do not list them as a table below.

The Congressional Budget Office produced two reports on the bill. The first examined the cost of the bill (CBO 2013a), while the second examined its economic impact (CBO 2013b). The cost estimate examines the net cost of the entire bill, including the border security expansions and legal immigration changes. It estimates that the overall bill will decrease the federal deficit by \$197 billion over ten years. On the revenue side, it would increase federal revenue by \$459 billion, about \$451 billion of which would come from increased income and payroll tax revenue from newly legitimized residents and increased legal immigration, with the remainder coming from visa fees and revenue from fines paid by formerly undocumented residents. The bill would increase the population of prime-age taxpayers by allowing more immigrants into the country, all of whom would be employed and many of whom would be highly skilled immigrants earning high wages. On the spending side, it would increase spending by \$262 billion.³⁶ Of the new spending, \$238 billion would come in the form of refundable earned income tax credits, child tax credits, and federal health care spending. The report notes that most

³⁶ CBO anticipated that Congress would authorize an additional \$15 billion in annual spending on border security, but did not include these potential appropriations in the cost estimate.

new adult immigrants would not be eligible for most federal means-tested benefits. While CBO also did not break down spending estimate between the two groups, although most of the costs would likely be concentrated in the lower-skilled, poorer group of formerly undocumented immigrants. In the second report on the impact of the bill on economic growth, CBO estimates that real GDP in 2023 would be 3.3% higher if the bill was passed versus the counterfactual of the bill not being passed.³⁷ While the report did not break down the impact of the expansion of legal immigration and legitimization of undocumented immigrants, it does specify that the majority of increased economic growth would come from increasing the size of the U.S. population through increased legal immigration and increases to total factor productivity caused by a more skilled U.S. workforce. The legitimization of undocumented immigrants would have a smaller effect, as those workers are already in the labor force, through increased productivity.

Both Democratic-aligned think tanks produced reports on the impact of immigration reforms on the economy and deficit. The Center for American Progress produced a primary analysis of the impact of the legalization portion of the immigration bill, while the Center on Budget and Policy Priorities only produced a secondary analysis. The CAP report, which was co-authored by a CAP research associate and an economist at Washington College, produced three different scenarios on the impact of legalizing 11 million undocumented immigrants on tax revenue and economic growth, varying the time when citizenship was granted in each scenario (Lynch and Oakford 2013). Based on

³⁷ The cost estimate noted that this increased economic growth should lead to macroeconomic feedback effects and thus further increase tax revenues, but did not perform a dynamic analysis of the bill's cost.

research on the 1980s amnesty, the report concludes that granting undocumented immigrants citizenship increases their economic productivity. Under its most optimistic scenario, where undocumented immigrants are granted citizenship shortly after being granted legal status, they project GDP in 2023 to be 3.20% larger than under the counterfactual of current law. They did not include the changes to legal immigration proposed by the bill in their estimates. The Center on Budget and Policy Priorities published one detailed secondary analysis, authored by two CBPP researchers, on the impact of the immigration bill on the economy and deficit. The report was a detailed summary and explanation of the CBO cost estimate and made little effort to reframe the issue (C. Stone and Parrot 2013)

The immigration bill encountered strong opposition from the Heritage Foundation. Heritage had opposed the Bush Administration's previous attempt at compromise immigration reform bill during the 110th Congress (2007-2008), publishing over 60 reports opposing it.³⁸ The American Enterprise Institute did not produce a report on the immigration during the debate over the 2013 bill.³⁹ The Heritage report, written by longtime Heritage Foundation researcher Robert Rector and a Jason Richwine, a newer Heritage staffer who earned his Ph.D. from Harvard in 2009 and briefly worked at the American Enterprise Institute, was controversial. The report estimated the cost of legitimizing 11 million undocumented immigrants over 50 years to be \$5.3 trillion. If

³⁸ Author's count based on data

³⁹ AEI did produce considerable commentary supporting immigration reform, including using similar political logic as the RNC report. See (Olson 2010; Ponnuru 2013).

legitimized, Rector and Richwine estimated they would receive federal, state and local services and transfers totaling \$9.4 trillion, while paying \$3.1 trillion in taxes. Under current law, their net cost during the same time period would be just \$1 trillion. Services included everything from means-tested benefits to the use of roads, public schools and the criminal justice system. While the \$5.3 trillion figure seems large, its 50-year time period and combination of federal, state and local analysis exaggerate the bill's impact; the report's estimate comes out to just \$106 billion annually. However, the figure was reported as if it were comparable to the CBO's cost estimate of the entire bill (Palmer and Vogel 2013).

There was a quick and decisive backlash to the report. Two days after it was released, Dylan Matthews, a *Washington Post* blogger, pointed out significant methodological errors made by Rector and Richwine, including assuming no macroeconomic feedback effect from legalizing 11 million undocumented immigrants despite considerable evidence that previous amnesties had increased their productivity and human capital, assuming that all of the current undocumented population would return to their home countries when they hit retirement age, and selectively counting tax expenditures and spending (Matthews 2013a). Two days later, Matthews published an article on Richwine's 2009 dissertation, "IQ and Immigration Policy", and its argument against Latino immigration because Latinos are genetically inferior to Whites,

"Richwine's dissertation asserts that there are deep-set differentials in intelligence between races. While it's clear he thinks it is partly due to genetics — "the totality of the evidence suggests a genetic component to group differences in IQ" — he argues the most important thing is that the differences in group IQs are persistent, for whatever reason. He writes, "No one knows whether Hispanics will ever reach

IQ parity with whites, but the prediction that new Hispanic immigrants will have low-IQ children and grandchildren is difficult to argue against." (Matthews 2013b)

Following an intense media backlash, the Heritage Foundation immediately noted that the dissertation was not published by the Heritage Foundation (Palmer and Vogel 2013).

Richwine resigned from Heritage two days later (Blake 2013).

To summarize, the think tanks and non-partisan sources made a variety of predictions on the impact of the Border Security Economic Opportunity and Immigration Modernization Act of 2013 on the economy and deficit. While some of these predictions are comparable, they do not cleanly line up, and thus are not easily summarized in a table. The Center on Budget and Policy Priorities published a secondary analysis that accepted the CBO report's conclusions with little reframing. AEI did not publish a report on the impact of the bill or similar reforms on the economy or deficit. The Center for American Progress published a primary analysis which predicted that legalizing 11 million undocumented immigrants would increase GDP by 3.2% after 10 years, as the formerly undocumented immigrants would increase their wages and human capital. While this estimate is similar to the 3.3% increased GDP forecasted by CBO, it does not include the changes to legal immigration that CBO expects to make up the bulk of the impact on GDP growth. Because CBO did not break down its economic impact estimate between the various components of the immigration bill, we cannot directly compare these estimates, other than to say that the CAP estimate is considerably biased in the progressive direction. CAP did not publish their own estimate of the bill's deficit impact, but we can assume that if they did so using the same economic growth forecasts, it would

project a significantly larger decrease to the deficit than CBO. The Heritage Foundation published its own primary analysis on the impact of legalizing 11 million undocumented immigrants on the deficit, but not economic growth. However, Heritage's estimate is also difficult to compare directly to the CBO estimate, as it estimated the impact of legalization on combined federal, state and local spending net of revenue, rather than just federal spending. It also primarily estimated the cumulative impact of legalization over 50 years, likely in order to inflate the headline number, rather than a more modest short-term impact. While it is difficult to directly compare the Heritage estimate that net spending would increase by \$5.3 trillion to the CBO's estimate that the entire bill would decrease the deficit by \$459 billion, the impact analysis is clearly biased strongly in the conservative direction.

Tax Cuts and Jobs Act of 2017

The Tax Cuts and Jobs Act (TCJA) was the signature legislative achievement of the 115th Congress. The law reduced federal taxes by \$2.3 trillion over ten years (CBO 2018). Its largest reductions were focused on corporations and the very rich. TCJA reduced the corporate income tax rate from 35% to 21%, allowed pass-through corporations to claim income at the lower corporate rate rather than as income, and moved U.S. corporate taxes from a worldwide to a territorial system. TCJA also raised the threshold on the estate tax from \$5.6 million to \$11.2 million and tweaked the structure of income tax brackets to decrease taxes on the rich and slightly increase taxes

on the poor. It also raised the standard deduction and changed the way that some tax deductions are claimed. TCJA narrowly passed both the House of Representatives and the Senate with no Democratic votes in December of 2017.

Much of the debate over TCJA centered around macroeconomic feedback effects. While all involved estimated that the law would cause a small macroeconomic boost and large increase in the deficit in the short-term, they disagreed about the long-term impact of the law on economic growth and therefore the deficit. Republicans argued that the corporate tax cuts in TCJA were designed to encourage investment into economy, and thus greatly increase economic growth while only marginally impacting the deficit over the long run. Democrats argued that they were pro-cyclical giveaways to the rich that would explode the deficit. These arguments mirror the same debates that the two parties had over the two tax cuts under George W. Bush and many of the Reagan-era tax cuts (Jones and Williams 2008; Prasad 2018). In both previous cases, the tax cuts failed to spur economic growth enough to beat their deficit projections (Jones and Williams 2008).

Four non-partisan information sources published primary estimates of the impact of TCJA on real GDP in 2027, at the end of the 10-year budget window required by the Senate's budget reconciliation procedure. The Congressional Budget Office published estimates for each version of the bill as it passed the House, Senate and eventually emerged from conference committee. However, a rushed legislative process meant that it did not have time to conduct its most thorough estimate of the version of the bill which eventually emerged from conference committee. The preliminary CBO cost estimate released on December 15th forecasted that the final bill would increase real 2027 GDP by

0.7%, therefore increasing the deficit by \$1.46 trillion (CBO 2017).⁴⁰ The Joint Committee on Taxation (JCT) produced a similar estimate of 0.8% GDP and \$1.5 trillion over 10 years. Two outside groups also provided detailed primary estimates of TCJA's macroeconomic impact. The first was published by an academic research group at the University of Pennsylvania led by economist Kent Smetters, who estimated the macroeconomic impact of the bill using a model known as the Penn-Wharton Budget Model (PWBM 2017). They published two predictions. If they assume that the bill increases productivity with a high return to capital investments into the economy, the model estimates that 2027 GDP will increase by 1.1% while the deficit increases by \$1.94 trillion. If they assume a lower return to capital investments, GDP increases by 0.6% and the deficit increases by \$2.23 trillion.⁴¹ Finally, the Tax Policy Center (TPC), a joint program of the Brookings Institution and Urban Institute, produced their own estimate led by Benjamin Page, a former CBO analyst (B. R. Page et al. 2017). They predicted that TCJA would have a much smaller impact on the economy, increasing 2027 GDP by just 0.4%. Both the PWBM and TPC also estimated the long-run impact of TCJA on GDP, coming to much different conclusions. PWBM predicted that the bill would increase 2040 GDP by between 0.7% and 1.6%. TPC predicts that it will have no long-run impact on GDP by 2037.

⁴⁰ CBO released a more detailed report on April 30th, 2018. It estimated that the deficit impact would be larger, at \$1.9 trillion. This chapter uses the December 15th estimate, as it is most comparable to the other impact analyses, which also had little time to perform their final analyses.

⁴¹ The estimates in Table 4.5 average the optimistic and pessimistic scenarios together.

No Democratic-aligned think tank produced their own impact analysis of the Tax Cuts and Jobs Act. The Center for American Progress published numerous reports criticizing the bill but focused on how it would raise middle class taxes while lowering taxes for the rich, rather than its impact on the deficit or economy (for example, see (Rowell and Schwartz 2017)). The Center on Budget and Policy Priorities published two detailed secondary analysis on the macroeconomic impact of the bill. The first compared the impact estimates of the four non-partisan sources, averaging their predictions together (Friedman and Stone 2017). The second argued that many of the bill's most popular tax cuts were set to expire in the middle of the 10-year budget window in order to keep the headline cost of the bill down, that even a Democratic-controlled Congress would likely feel pressure to maintain these tax cuts, and therefore the true headline cost of the bill would likely cost \$200 billion over the official estimates. In both cases, the Democratic-aligned think tanks engaged in framing, rather than elite persuasion.

Both the Heritage Foundation and American Enterprise Institute published primary estimates of the impact of TCJA on economic growth. Both reports estimated the impact of TCJA on economic growth but did not estimate its impact on the deficit. Each used in-house models to estimate the impact of tax changes on the economy but came to different conclusions. The AEI report, written by two resident AEI researchers, estimated the macroeconomic impact of both the House and Senate versions of the bill, but not the conference report. They predicted that the Senate version of the bill would increase 2027 GDP by 0.92% and long-run GDP by 2.2%. Two Heritage researchers used their own model to estimate the macroeconomic impact of TCJA. They released a more detailed

report on the House and Senate bills in November (Sheppard and Burton 2017a) and a brief updated estimate using the same model on the conference report in December (Sheppard and Burton 2017b). They predicted that the TCJA would dramatically increase capital stock and working hours, resulting in an increase a 2.2% increase in long-run GDP. While they did not estimate the bill's impact 2027 GDP, they noted that, "most of the increase in GDP would likely occur within the 10-year budget window" (Sheppard and Burton 2017b, 1). Neither the AEI nor Heritage report estimated the impact of the TCJA on the deficit, although we can assume that it would be smaller than estimates predicting a weaker feedback effect on economic growth.⁴²

Table 4.5 shows all of these estimates. The four non-partisans predicted that the TCJA would increase 2027 GDP by between 0.4% and 0.85% and increase the deficit by between \$1.1 trillion and \$2.05 trillion. In the long run, they predicted that GDP would increase by between 0 and 1.1%. Democratic-aligned think tanks accepted these conclusions, instead focusing their efforts to reframe the issue as one of rich versus poor. Republican-aligned think tanks, on the other hand, chose to engage in elite persuasion by publishing biased research which found a much larger impact of the tax cuts on the economy. This bias showed up most strongly in their long-term analysis. Both predicted a much larger long-run impact on economic growth than the non-partisan sources who attempted to long-run growth. In the short-term, AEI's prediction was in line with the high end up of non-partisan expectations. While Heritage did not offer a specific short-

⁴² One further Republican-aligned think tank report from the Tax Foundation received considerable attention (Tax Foundation 2017). It predicted that the TCJA would increase 2027 GDP by 2.68% and the deficit by \$448 billion.

term prediction, the report states that most of their long-run 2.2% prediction would come in the first 10 years, which would far exceed non-partisan predictions for the bill’s short-term impact. Finally, while the Republican-aligned think tanks did not formally estimate TCJA’s impact on the deficit, their predictions suggest a much lower cost than the non-partisan estimates.

	Organization	GDP (2027)	GDP (Long Run)	Deficit (2027)	Primary?
Democratic	Center for American Progress ¹	n/a	n/a	n/a	No
	Center on Budget and Policy Priorities ²	0.66%	n/a	\$1.6 trillion	No
Non-Partisan	Congressional Budget Office	0.70%	n/a	\$1.46 trillion	Yes
	Joint Committee on Taxation	0.80%	n/a	\$1.1 trillion	Yes
	Penn-Wharton Budget Model ³	0.85%	1.15%	\$2.05 trillion	Yes
	Tax Policy Center	0.40%	0.00%	\$1.8 trillion	Yes
Republican	Heritage Foundation	n/a ⁴	2.20%	n/a	Yes
	American Enterprise Institute ⁵	0.92%	2.05%	n/a	Yes

1. CAP did not issue a report on the impact of TCJA on the economy.

2. The CBPP report averaged together the four non-partisan sources

3. The Penn Wharton Budget model estimated both a high and low scenario for the impact of TCJA on economic growth. 0.85% is the average of the two scenarios.

4. The Heritage Foundation report did not estimate the impact of TCJA on 2027 GDP, but noted that "most of the increase in GDP would likely occur within the 10-year budget window." (Shepard and Burton 2017, 1)

5. The AEI report estimated the impact of the House and Senate versions of the bill, but not the conference report. Estimates here are for the Senate version.

Table 4.5: Analyses of the Impact of the Tax Cuts and Jobs Act on Real GDP in 2027

SUMMARY

This chapter compared estimates of the impact of five proposed policy changes made by party-aligned think tanks and non-partisan information sources. On all of these issues, at least one party-aligned think tank published a report that predicted an outcome considerably to the left or right of the non-partisan sources, and in their preferred

direction. The think tanks also engaged in considerable reframing of issues toward more conservative or liberal aspects of the policy. All else being equal, we should expect a co-partisan who reads these reports and finds them persuasive to shift their preferences away from the recommendations of non-partisan information sources and toward the extremes.

However, there was considerable variation, both between and within political parties. In each case, Republican-aligned think tanks produced impact estimates considerably to the right of non-partisans. One Democratic-aligned think tank, the Center for American Progress, produced estimates to the left of non-partisans in two of the five cases, but actually produced a result considerably to the right in one case. The analysis also suggested that two party-aligned think tanks are considerably closer to the center than their co-partisan counterparts. The American Enterprise Institute produced one estimate to the right of non-partisans, did not produce a report in one case, and accepted non-partisan analysis in two cases. In the remaining case, they referenced a third-party report with conclusions only slightly to the right of the non-partisan consensus. The Center on Budget and Policy Priorities never produced their own estimates or even referenced the biased estimates of their co-partisans. Instead, they always relied on the consensus of non-partisan estimates.

Using these results, we can roughly map out the four party-aligned think tanks in ideological space. First, the Center on Budget and Policy Priorities is firmly planted slightly to the left of center. While they did not produce any biased estimates, they did work to reframe issues to focus on more progressive aspects of the policy, such as how it would affect the poor. Next, the American Enterprise Institute sits in the center-right,

although farther from the center than the Center on Budget and Policy Priorities. AEI produced one biased report out of five cases, reframed issues to focus on more conservative aspects of the policy, but also tended to defer to the non-partisan consensus on issues. Further to the extremes, both the Center for American Progress and Heritage Foundation sit considerably farther from the center. Both organizations tend to produce biased information rather than rely on the non-partisan consensus. However, Heritage is also clearly farther to the right than CAP is to the left. In each case, Heritage produced its own independent estimate of the impact on policy that was biased in a more conservative direction, while CAP only did so in three of five cases. In two of those three cases, Heritage's estimates were considerably farther from the center than CAP's.

There were considerable differences in rigor between the various think tanks. CAP and the American Enterprise Institute tended to work with respected scholars in their field. AEI, through their adjunct and visiting scholar programs, often produced reports and commentary authored solely by respected scholars. CAP researchers tended to co-author with academics working in their field. While both think tanks likely selected these scholars by seeking out progressive or conservative-minded academics, their presence likely prevented the information from veering too far from the non-partisan consensus. Heritage, on the other hand, produced all of its independent reports either in-house or by contracting analysis from a for-profit consulting firm. This lack of concern for scientific rigor likely enabled their divergence from the scientific consensus, although in one case it backfired and created significant controversy around the report.

However, we should resist generalizing too much from results based on five cases that may not be representative of all policy analysis produced by these party-aligned think tanks. By limiting comparisons to cases where multiple think tanks produced comparable estimates of the impact of a policy on some output, we ignore several types of issues. First, we ignore cases where the policy never advances far enough in the agenda to produce multiple impact analyses. These excluded cases may be less salient than the included cases, and thus party-aligned think tanks may have less incentive to produce biased information on them. Relatedly, agenda setting limitations make it difficult to compare information produced by decentralized university-structured think tanks, like the American Enterprise Institute, with advocacy think tanks, like the other three. Advocacy think tanks respond strategically in response to the policy agenda, while decentralized think tanks allow their researchers to set their own agenda. As a result, the AEI reports analyzed here tended to be shorter, less detailed, and more commentary-oriented than the reports from the other think tanks. These reports may not be representative of AEI reports produced on other issues. Second, we ignore cases where party-aligned think tanks do not disagree strongly enough with non-partisan estimates or each other to produce their own primary or secondary impact analyses. In these cases, party-aligned think tanks may still reframe issues or simply cast doubt on non-partisan information without producing a counter-estimate of their own. Finally, we ignore cases where impact analyses are difficult to produce or unnecessary in policy debates.

Chapter 5: Polarization and Party-Aligned Think Tanks Over Time

Up until this point, I have examined the historical context and causes of party disagreement over policy analysis. I've argued that after adopting a consensus knowledge regime during the middle of the 20th century centered around non-partisan expertise, both political parties eventually adopted their own alternative knowledge regime toward the end of the century centered around party-aligned think tanks. I then integrated the knowledge regime framework, which is drawn from sociology, into political science theories of party position-taking. I argued that party-aligned think tanks could influence party positions using a variety of strategies. Finally, I compared the policy analysis of party-aligned think tanks to non-partisan information, finding that it tends to either be biased in the party's preferred direction or works to reframe the issue to focus on aspects of the party's core priorities.

In the second half of this dissertation, I move to testing whether party-aligned think tanks are ultimately successful at influencing their party's positions. This relationship has been examined by a various single-issue studies, on climate change (Albert 2019; Bonds 2016; Brulle 2014, 2018; Dunlap and Jacques 2013; Farrell 2015; McCright and Dunlap 2003; Merkley and Stecula 2018), education policy (Haas 2007; Lubienski, Brewer, and La Londe 2016; McDonald 2014), welfare (O'Connor 2001), health care (Hertel-Fernandez, Skocpol, and Lynch 2016) and taxes (Hertel-Fernandez and Martin 2018). While these studies suggest a link between party-aligned think tanks and party positions, even as a group they cannot test the hypothesis generally. By

focusing on individual issues, each potentially suffers from a selection bias. These issues likely drew the attention of scholars because they are all highly salient areas of intense partisan conflict where party positions are quite polarized and are thus unrepresentative of party positions generally.

In Chapters 5 and 7, I test the general relationship between party positions and party-aligned think tanks by examining polarization in Congress. While the polarization and party positions literatures are often theoretically separated, they fundamentally examine the same phenomenon. Polarization occurs when party positions move farther apart. These positions are often revealed through roll call voting in Congress, where most polarization studies occur. Therefore, we can infer changes in party positions by examining increased party disagreement in roll call voting in Congress. Party-aligned think tanks prefer more progressive or conservative positions. If they are successful at persuading their co-partisans to adopt different positions, parties in Congress will move their preferences in a progressive or conservative direction, which we can measure as a change in levels of polarization. Thus, we can use polarization to measure the influence of party-aligned think tanks on party positions.

This chapter proceeds as follows. In the first section, I review the literature on polarization in Congress. While the literature has evolved over time, I find broad agreement on an order of events: Congress polarized before the public did, the Republican Party polarized before the Democratic Party, and the House of Representatives polarized before the Senate. However, I find little agreement on the causes of polarization. Scholars identify a broad range of causes, many of which only

manage to explain polarization at a particular time. I conclude that we must seek out an explanation for rapid changes in elite preferences over.

In the second section, I argue that elite persuasion by party-aligned think tanks can explain the rise in polarization. I introduce three datasets of party-aligned think tank outputs over time: think tank testimony before Congress, real revenue and citations in major newspapers. I hypothesize that polarization will increase only after the outputs increase. Finally, I propose a number of time series models to evaluate these hypotheses.

In the third section, I present the results of these models. I find a strong and persuasive correlation between polarization and think tank revenue and witness testimony over time and some evidence of a temporal ordering for each variable that supports a causal connection between them. I also find that newspaper citations of party-aligned think tanks increased well before polarization, but the relationship is more likely to be spurious than the other two outputs.

In the final section, I summarize my findings. I conclude that there is strong evidence of a connection between polarization in Congress over time and increased activity from party-aligned think tanks. However, the evidence on temporal ordering only suggestive rather than convincing on its own. I argue that time series analysis alone is insufficient to characterize the relationship between party elites at party-aligned think tanks and polarization, and thus other research designs are necessary.

RESEARCH ON POLARIZATION

Dozens of scholars spanning multiple decades have contributed to the literature on polarization in Congress. Polarization, or the distance between the preferences of political parties, began to increase in 1978. Poole and Rosenthal first observed the increase as early as 1984, when they observed that same-state senators who share a party affiliation tend to vote very similarly, but same-state senators who differ in party affiliation tend to vote very differently (Poole and Rosenthal 1984). They inferred that the geographic forces pushing senators to represent the local median voter's preferences over national party preferences were breaking down. They also observed that while senators were increasingly polarized, their elections were also competitive. In most races, either party had an opportunity to win any given race. They speculated post hoc that activists and interest groups operating on the party's extremes were the cause of the shift toward polarization, although they did not test their intuition.

Since then, scholars have searched for causal explanations of the shift toward polarization in Congress. While the literature offers multiple non-mutually exclusive explanations for increased polarization, it does agree on one basic order of events: elected officials polarized long before the public. Median voter theory (Downs 1957; Holcombe 1980) (Downs 1957; Holcombe 1980), and some related electoral-based theories of Congressional behavior (Mayhew 1974), predict that elected officials and parties will support policy that is close to the median voter's preferences in order to compete in elections. Thus, a shift in preferences, such as the shift that occurs when a legislature polarizes, should follow a shift in the distribution of opinion in the electorate. However,

scholars find clear evidence that the mass public polarized much later than their elected officials (Dimock et al. 2014; Fiorina 2017; Fiorina, Abrams, and Pope 2011). While there was some ideological shift by the electorate during the early period of polarization, it was confined to only a few issues such as gay rights and abortion (Fiorina, Abrams, and Pope 2011). The electorate only began to sort into coherent ideological groups in the 2010s (Dimock et al. 2014). Therefore, polarization could not have been caused by a shift in public opinion in the general electorate.

Similarly, there is little evidence that changes in districts or primary elections caused the shift (Abramowitz, Alexander, and Gunning 2006; M. Barber and McCarty 2015; Hirano et al. 2010; Layman, Carsey, and Horowitz 2006; McCarty, Poole, and Rosenthal 2006; McGhee et al. 2014). Although the mass electorate did not become more polarized until long after elites did, a combination of redistricting and primary elections could have caused members to adopt more extreme policy positions in order to respond to changes in the preferences of the median voter in their district or primary electorate. However, research consistently rejects both explanations (M. Barber and McCarty 2015; Layman, Carsey, and Horowitz 2006). Republican representatives in more gerrymandered districts are equally conservative as their colleagues in more competitive districts, and Democratic representatives are only slightly more liberal (M. Barber and McCarty 2015; McCarty, Poole, and Rosenthal 2006). Increased gerrymandering is only related to polarization to the extent that it has created more Republican representatives, who tend to be more extreme than their Democratic colleagues (McCarty, Poole, and Rosenthal 2009). There is also little evidence that changes in primary elections have an

impact on polarization (M. Barber and McCarty 2015; Hirano et al. 2010; McGhee et al. 2014). These factors also could not have caused elite polarization.

The consensus literature thus concludes that elites were not polarized by the electorate. While these studies leave open the possibility that the very recent and sharp increases in polarization are related to changing districts or electorates, historically these factors are not related to polarization in Congress. Indeed, the direction of causation likely runs in the other direction. Elites likely transferred their preferences to the public through cue-taking and conflict extension mechanisms (Layman and Carsey 2002; Zaller 1992). The election of Barack Obama also likely played a role in the polarization of the electorate in the 2010s, as voters sorted more heavily on racial lines (Sides, Tesler, and Vavreck 2018).

If the public did not push elites to polarize, then why did elites become more extreme? One explanation argues that geographic sorting made the party positions more coherent (Jacobson 2015; Rohde 1991; Theriault 2003). When Lyndon Johnson signed the Civil Rights Act of 1964, he famously declared that in doing so, he signed away the South for the Democratic Party for a generation. Segregation and other civil rights issues were the most important sources of intraparty disagreement dividing the Democratic Party. Absent a key wedge issue, legislative party leaders were able to demand more unity of their caucuses (Rohde 1991). Southern whites became increasingly Republican, putting pressure on their elected officials to leave a Democratic party that was increasingly progressive on racial issues. However, while Johnson was eventually proven correct, he was off by a generation. While Richard Nixon and Ronald Reagan were

successful at winning Southern states in Presidential elections, Democrats remained competitive in the South well into the 1990s (Jones, Theriault, and Whyman 2019). While these post-Civil Rights Act Southern Democrats were generally more conservative than their colleagues, both grew more progressive at similar rates (Jones, Theriault, and Whyman 2019). While geographic sorting did in fact make the parties more ideologically coherent, it fails to explain why polarization began to increase in 1978, rather than the late-1990s. It also fails to explain contemporaneous ideological shifts on other issues, such as environmental policy (Karol 2019), and average ideology shifting toward the extremes due to adaptation (Theriault 2006).

Another explanation for elite polarization is increased partisan competition (Lee 2009, 2016; Theriault 2008, 2013). The parties have increasingly disagreed not only on ideological policy positions but have used the legislative process to fight the other party. Lee (2009) observes that party disagreement in the 1990s and 2000s grew sharp not only on traditionally ideological issues, but also issues with no obvious conflict between conservatives and progressives, such as anti-corruption or “good governance” issues or uncontroversial spending issues such as the NASA budget. Lee argues that parties strategically use these issues to attack the other party, such as supporting anti-corruption actions on the executive branch only when it is held by the opposition. Lee argues that parties increasingly used these strategies when control of the chambers of Congress became less certain as the Democratic New Deal coalition slowly disintegrated (Lee 2016). Indeed, Theriault (2013) finds that Newt Gingrich and other members of the House Republican caucus elected after 1978 quickly adopted partisan warfare tactics,

pushing their colleagues to become more extreme. He also finds that changes in Congressional procedures caused much of the early polarization in roll call voting, rather than votes on final passage (Theriault 2008). While increased partisan competition can explain the shift away from cooperation and toward more teamism, it does not offer much to explain substantive changes in party positions over time and is thus necessary but insufficient to explain why elites polarized.

Scholars have identified a number of other factors external to the parties which contributed to polarization. Rising inequality and the entrance of billionaire donors may have tilted Republican Party politicians to the right (Hertel-Fernandez 2019; McCarty, Poole, and Rosenthal 2009; B. I. Page, Seawright, and Lacombe 2019). Highly ideological small donors may have pushed candidates toward the extremes (M. J. Barber 2016). Polarization and increased partisan warfare may have resulted in moderate candidates opting out of running for office (Thomsen 2014, 2017). Partisan media or cable news may have created more partisan warfare (Zelizer 2006). While many of these factors are convincing theoretical explanations for polarization, none to date have been shown to persuasively explain polarization over the full time period (M. Barber and McCarty 2015).

Finally, the parties themselves may have caused their own shift toward polarization. If party actors change their preferences for policy, they may be able to transmit those new preferences to the behavior of elected officials. By the early 1960s, both political parties developed coherent progressive and conservative ideologies (Noel 2014). If by some mechanism these ideologues transmitted their preferences to elected

officials, they could be responsible for polarization. Jones et al (2019) argue that the rapid expansion of the scope of the federal government policy agenda created an opening for conservative ideologues to capture the Republican Party. In both parties, ground-level party actors, such as convention delegates, changed their preferences long before elected officials (Schickler 2016; Wolbrecht 2002). Party platforms themselves tended to use similar language to talk about policy until 1980, when they sharply diverged more quickly than polarization in roll call voting (Wood and Jordan 2017). Legislative party leaders in Congress have some ability to exert agenda control, which can increase polarization if their preferences are to the left or right of the median voter (Cox and McCubbins 1993). Party actors may also be able to exert control of party nominations, ensuring member replacement with friendly candidates (Bawn et al. 2012).

A party-level explanation for polarization is appealing for two reasons. First, the parties polarized at different times (Theriault 2008). The Republican Party moved earlier and farther to the left than the Democratic Party. Therefore, the most important cause of polarization should affect the parties unequally and at different times. Second, over the long term legislative parties as a whole moved to the left and right, rather than individual factions of the party (M. Barber and McCarty 2015). Therefore, the most important cause of polarization affected the entire party, rather than individual members or factions of members.

The multiplicity of explanations for polarization suggest that no one independent variable caused it to rise or, or that causes varied throughout the past four decades. The systems determining policy preferences for members of Congress and political parties are

complex and will defy monocausal analysis. Indeed, many of these proposed causes are themselves interrelated. In this chapter, I focus on one powerful cause of polarization over time: the increased influence of highly ideological and well-organized information producers at party-aligned think tanks. However, we should acknowledge the complexity of the polarization story, and understand that the monocausal analysis that I perform is one interrelated piece of a larger story.

Elites at Party-Aligned Think Tanks and Polarization

Legislators have preferences for policy outputs that are revealed by roll call voting in Congress. These preferences are derived from their values, incentives and policy analysis (see Chapter 3). Party-aligned think tanks can modify these preferences, by reframing the issue, activating latent preferences or through elite persuasion. If they are successful, they will move their co-partisan's preferences to the left or right. As they do so, the ideological distance between the political parties will increase. Thus, if we observe greater influence of party-aligned think tanks in Congress and on broader American politics at one point in time, we should observe greater polarization at a future point in time.

To measure the dependent variable, polarization in Congress over time, I used the difference of party means as measured by the first dimension of DW-NOMINATE data from Lewis, Poole and Rosenthal (2019). These data use a scaling procedure to represent each legislator's roll call voting behavior on a spatial map. They are the most commonly

used data to measure polarization in Congress. As the distance between the average legislator in each party grows larger, polarization increases. To measure the activity of party-aligned think tanks over time, I compared three different outputs by party-aligned think tanks with polarization. If party-aligned think tank outputs cause polarization, their activity will increase before polarization. I have no *a priori* expectations for the size of the lag. All data is measured at the Congress unit of analysis, as DW-NOMINATE is measured by Congress rather than annually.

First, I examine party-aligned think tank testimony before Congressional hearings. As they become more influential, party-aligned think tanks will be called to testify before Congressional hearings more often. Members of Congress use hearings to gather information on emerging policy problems, build external and internal support for policy proposals, or to interrogate bureaucrats (K. Bawn 1997; Lewallen, Theriault, and Jones 2016; Shafran 2015; Workman 2015; Workman, Shafran, and Bark 2017)(Bawn 1997; Lewallen, Theriault, and Jones 2016; Shafran 2015; Workman 2015; Workman, Shafran, and Bark 2017). If party-aligned think tanks are considered more valuable information sources, they will be called to testify more often. While hearings are public, the vast majority of hearings receive little to no media attention. Thus, party-aligned think tanks are more likely to use hearings to engage in elite persuasion and framing, rather than activating latent preferences. To measure the number of times that party-aligned think tanks testified before Congress, I identified each instance of testimony recorded in the ProQuest Congressional database using keyword searches, aggregating by Congress. This process yielded 856 witnesses between the 93rd and 114th Congresses.

Because the total number of Congressional hearings varies over time, I then divided the number of witnesses by the total number of hearings.

Second, I measure think tank size over time. As think tanks become bigger, they produce and disseminate more information using all three strategies. Ideally, I would measure the overall expenditures of each think tank. These data are extractable from IRS Form 990s, which are publicly available back to 2001 in the ProPublica Non-Profit Explorer database. However, these data are not available before 2001. Given that the unit of analysis is necessarily one Congress, this yields only eight observations between 2001 and 2016, and are thus not sufficient to test a time series hypothesis, nor does it examine the periods where polarization first began increasing (the late-1970s) or dramatically accelerated (the mid-1990s). However, I was able to reconstruct the real revenue of the Heritage Foundation going back to its creation in 1973 using a variety of archival sources.⁴³ While I would prefer to measure the size of all four think tanks over the whole period, the Heritage Foundation is the largest and most influential organization of the group (Weidenbaum 2011). This limitation decreases the representativeness of any results using these data.

Finally, I measured think tank newspaper citations over time. Party-aligned think tanks often represent the progressive or conservative side in media debates (Groseclose and Milyo 2005; Rich and Weaver 2000). Their research tends to gain more frequent media attention than academic research, both due to aggressive marketing by the think

⁴³ See Appendix Table 5.1

tanks themselves (McGann 2016; Rich 2005) and their ability to exploit journalist equivalency norms when reporting politics (Boykoff and Boykoff 2004; Haas 2007). While both mass publics and elites receive much of their policy information through the media (Wolfe 2012), these activities are more likely than direct outreach or Congressional hearings to be aimed at a broader public, and thus more likely to reflect strategies where think tanks activate latent preferences or reframe issues. If these activities cause polarization in Congress, polarization should increase shortly after party-aligned think tanks are cited more frequently in the media. Using keyword searches, I identified each story where a think tank was cited by name in a New York Times, Washington Post, Reuters, or Associated Press story in LexisNexis' database between 1977 and 2016.⁴⁴ This process yielded 20,635 citations over the period.⁴⁵ I aggregated citations annually.

RESULTS

Party-Aligned Think Tanks and Polarization in Congress

Figure 5.1 shows the overall trend of polarization in Congress between 1973 and 2016. Between 1933, when Franklin Delano Roosevelt assembled the New Deal coalition, and 1978, the average difference in party means for both chambers remained between 0.50 and 0.60. It began increasingly slowly, but steadily, from 1978 through 1995. During this period, policymaking was still quite bipartisan. Democrats controlled

⁴⁴ Ideally, I would also include *Wall Street Journal* stories, but these data are not available.

⁴⁵ Unlike revenue and witness testimony, these data suffer from not knowing the total number of political stories produced by these media organizations over the time period. A change in total citations may not be indicative of a change in the total rate of citations.

the House of Representatives during the full period, while the Senate and Presidency were split between the two parties. Even though polarization was increasing, Congress passed major bipartisan reforms against entrenched interests in the trucking, airline, natural gas and telephone industries (Jones, Theriault, and Whyman 2019). Under divided government, Congress passed some of the most significant tax and budget legislation in American history, an issue area of historic partisan disagreement (Gerring 2001). These laws included the largest tax cut ever in 1981, a massive bipartisan tax reform in 1986 that reduced rates by closing loopholes and reducing inefficiencies (Birnbaum and Murray 1988), a major Social Security reform, and two significant deficit reduction deals that featured both spending cuts and tax increases (Mayhew 2005). On environmental policy, Congress passed the Superfund Act and Clean Air Act, as well as numerous laws to regulate and clean up toxic waste (Karol 2019; Mayhew 2005). Major environmental groups were strongly non-partisan, only endorsing a Presidential candidate during the 1988 race because of the strong Texas oil connections of George H.W. Bush (Karol 2019). Congress established the Department of Education, the federal job training system, sanctioned the apartheid government in South Africa over the President's veto, passed the Americans with Disabilities Act, and enacted two major immigration reforms (Mayhew 2005). While the parties disagreed on many issues, they were able to come together to solve problems effectively.

This period ended in 1995, when Republicans took control of both chambers of Congress following the 1994 mid-term elections. Polarization sharply increased from 0.69 in during the 103rd Congress to 0.73 during the 105th, plateauing for most of the late-

1990s and 2000s. During this period, members of Congress increasingly broke established norms for conduct in Congress (Theriault 2013). Newt Gingrich, the newly-elected Speaker of the House, used aggressive tactics against the Democratic Party, including shutting down the government twice in 1995 and the investigation and impeachment of President Bill Clinton in 1998 (Mason 2018; Rosenfeld 2018; Theriault 2013). Polarization accelerated again after the 2010 elections, reaching a high of 0.85 in the 114th Congress.⁴⁶ The modern Congress is more polarized today than at any point since the creation of the modern two-party system.

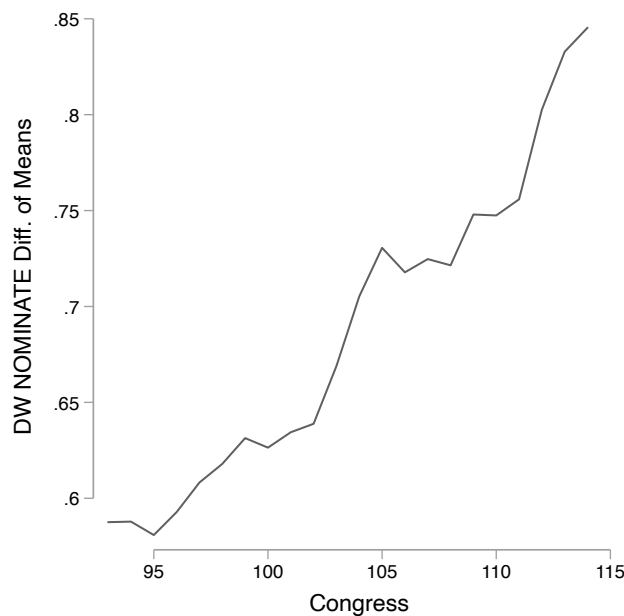


Figure 5.1: DW-NOMINATE Difference of Means (Average of Both Chambers), 1973-2016

⁴⁶ While the scope of this chapter stops at 2016 due to data availability, polarization continued to increase in the 115th and 116th Congresses. The average difference of party means in the 116th Congress, as of the end of 2019, was 0.91.

The growth of the Heritage Foundation very closely matches the trend in polarization. Heritage was founded in 1974 by Paul Weyrich, Edwin Feulner, two former Republican Study Committee staffers, and Joseph Coors, the heir to the Coors Brewing fortune. Discontent with the cooperation between Richard Nixon and Democrats in Congress, they sought to push the Republican Party toward a more conservative ideology (Edwards 1997). The Heritage Foundation grew at almost exactly the same pace as polarization increased. Figure 5.2 shows the trends for polarization in Congress and the real revenue of the Heritage Foundation. The two series are closely correlated ($\rho = 0.98$). The Heritage Foundation grew steadily from its founding until the mid-1990s, when it doubled in size, and the late-2000s, when it doubled again. While both series are significantly related to a trend variable ($p < .001$), they are also significantly related when the trend is removed. Figure 5.3 shows the detrended polarization series on the y-axis and the detrended Heritage Foundation series on the x-axis.⁴⁷ There is a positive and significant relationship between the two variables at time t ($r^2 = 0.37$ $p = .003$).⁴⁸ The relationship between Heritage Foundation revenue at $t-1$ and polarization at t ($r^2 = 0.29$ $p = 0.012$) is also significant, while the reverse is not ($r^2 = 0.13$, $p=0.139$), suggesting that the Heritage Foundation increased before polarization, although relationship at time t is stronger. These results provide persuasive evidence of a non-spurious relationship

⁴⁷ Each axis contains the residuals of the series when regressed on a trend variable.

⁴⁸ The relationship remains positive and significant if the 113th Congress, which appears to be an outlier, is excluded ($p=0.012$).

between the two variables, and slightly less persuasive evidence that the relationship is lagged.

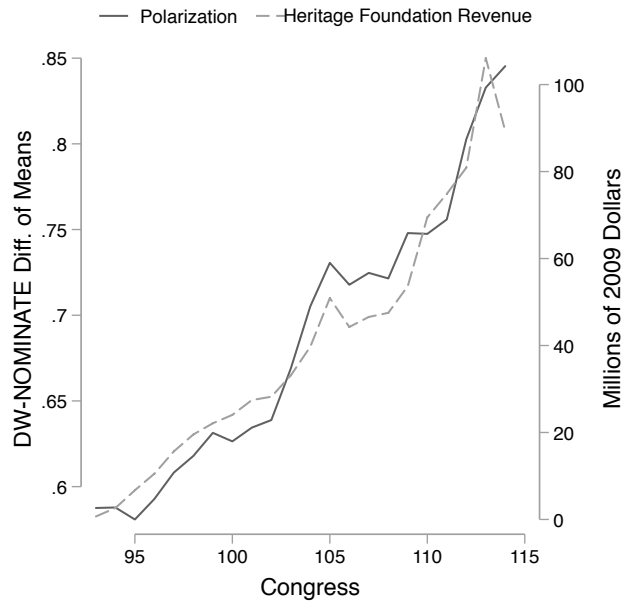


Figure 5.2: Polarization and Heritage Foundation Revenue

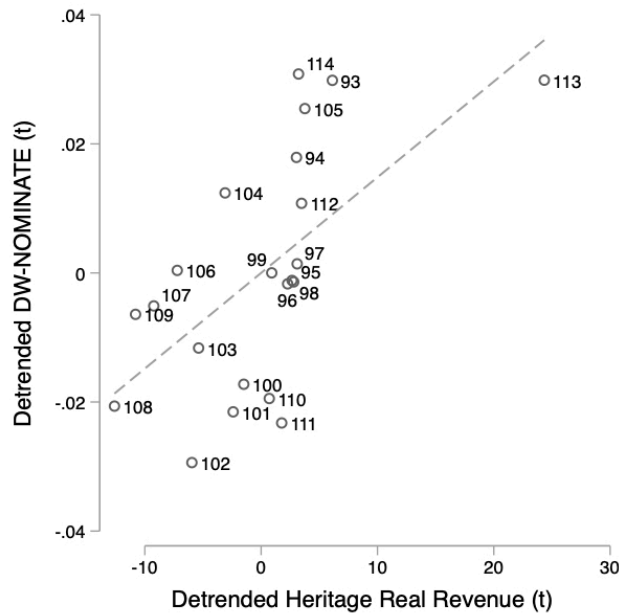


Figure 5.3: Polarization and Heritage Foundation Revenue, Detrended

Next, I turn to witnesses. Unlike the revenue series, these data encompass all four party-aligned think tanks in the sample. Figure 5.4 shows party-aligned witnesses per Congressional hearing and average difference of DW-NOMINATE party means. There is a similar pattern as with revenue, but with important differences. Like revenue, party-aligned think tank witnesses start out slow. During the early period, only the American Enterprise Institute and Heritage Foundation existed, as the two Democratic-aligned think tanks were not founded until 1981 and 2003. They slowly increase in influence through the early period of polarization, before making a big spike after Republicans take over Congress in 1995. During the 104th Congress, researchers at both Republican-aligned think tanks testified heavily to support the passage of policy promises contained in the

Contract for America (Gayner 1995). Many of these promises were based on proposals authored at the think tanks, including severe cuts to Congressional staff and legislative support organizations, the 1996 welfare reform law, cuts to the discretionary budget of the federal government, and a change in the structure of the federal tax code for dual-filers to eliminate the “marriage penalty” (Gayner 1995; Stahl 2016). After these promises were considered, the witness series reverts back to the polarization trend in the following Congress. It begins increasing again in the late-2000s, in part due to a substantial increase in the rate of Democratic-aligned think tank witnesses. The series drops off considerably during the 114th Congress. This may be due to the 114th’s status as a historically unproductive Congress in terms of legislation.

There is stronger evidence to conclude that the rate of party-aligned think tank testimony increased before polarized when compared with revenue. Figure 5.5 compares the detrended polarization series with detrended witness testimony. There is a positive and significant relationship between the rate of party-aligned think tank testimony at $t-1$ and polarization at t ($r^2 = 0.21$ $p = 0.035$), but no relationship between the variables at time t ($r^2 = 0.01$ $p = 0.746$). This relationship is consistent with a process where party-aligned think tanks witnesses cause polarization to increase, rather than the reverse, or a mutually reinforcing relationship. It also suggests that party-aligned think tanks engage in successful elite persuasion strategies, as hearings are largely attended by and directed to elites, rather than the larger public.

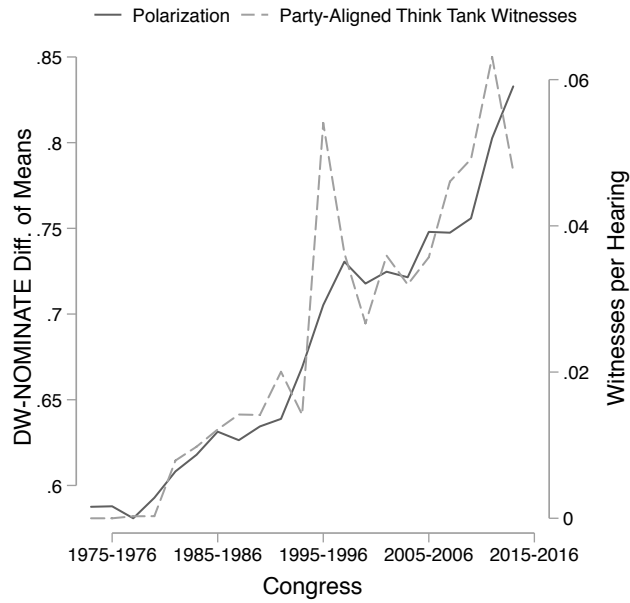


Figure 5.4: Polarization and Party-Aligned Think Tank Witnesses

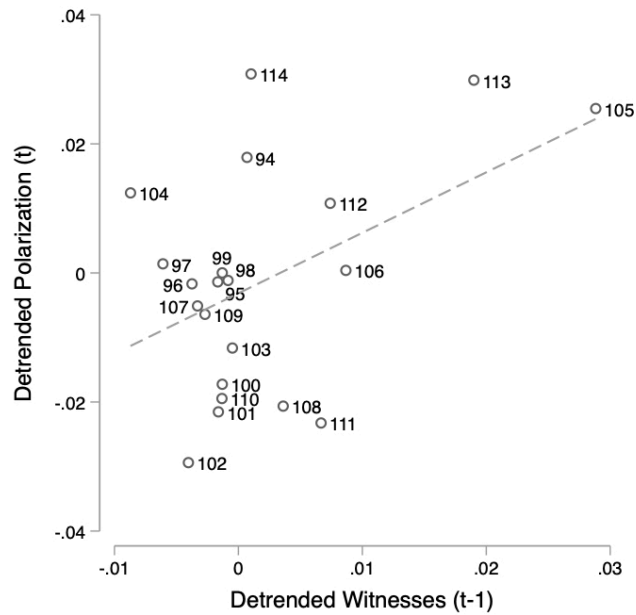


Figure 5.5: Polarization and Party-Aligned Think Tank Witnesses, Detrended

Finally, I explore newspaper citations of party-aligned think tanks. Similarly, increased media citation of party-aligned think tanks may indicate that more conservative or liberal views are becoming mainstream and may thus be an indicator of their success rather than a cause of it. Figure 5.6 shows the number of citations of party-aligned think tanks in the New York Times, Washington Post, Associated Press and Reuters from 1977-2016. While both are increasing over the time period and thus correlated ($p < .001$), there is little relationship at t once the series are detrended ($p = 0.409$), and no significant relationship at times $t-1$ through $t-4$. There is a significant relationship between polarization at time t and newspaper citations at time $t-5$ ($p = 0.005$), but overall the relationship is more likely to be a product of similar trends than directly causal. These data suggest that the role of think tanks in activating latent preferences through media debates is less strongly linked to polarization than the other strategies, although their media presence did increase considerably during the time series.

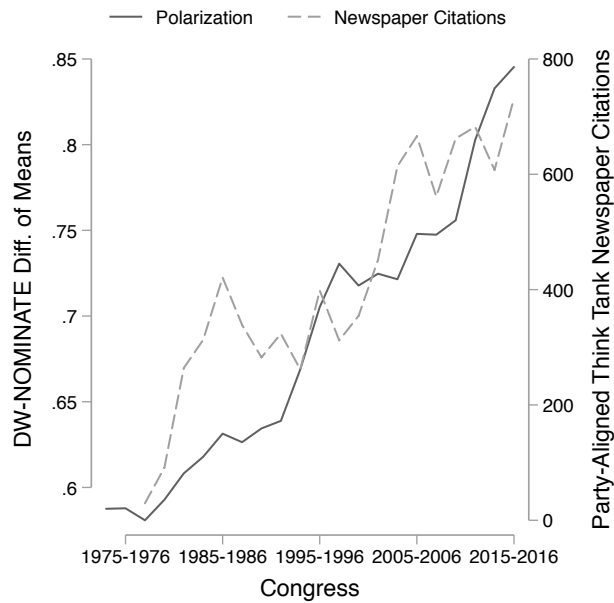


Figure 5.6: Party-Aligned Think Tank Newspaper Citations and Polarization

Party-Aligned Think Tanks and Cuts to Congressional Capacity

In addition to a dramatic increase in the influence of party-aligned think tanks, another important and related event happened in the realm of information processing in Congress in 1995. Fulfilling a promise made in the Contract for America, Republicans in Congress severely cut the budgets of Congressional committee and professional staff and analytical bureaucracies (Baumgartner and Jones 2015b; Glastris and Edwards 2014). These cuts had the effect of significantly lowering internal Congressional capacity to process information. Figure 5.7 shows the number of staff working at the Congressional Budget Office, Congressional Research Service and Office of Technology assessment. These agencies provide vital policy analysis to Congress on a broad range of issues

(Baumgartner and Jones 2015; Fagan and McGee 2020; Kevin Kosar 2016). For example, the Congressional Research Service creates “reports, memoranda, customized briefings, seminars, videotaped presentations, information obtained from automated data bases, and consultations in person and by telephone” (Brudnick 2008, iv). Between 1997 and 2017, CRS published 13,536 reports on a broad range of domestic and foreign policy issues (Fagan and McGee 2020). Collectively, they lost about a quarter of their staff in 1995, and another 12% due to the Budget Control Act of 2011.

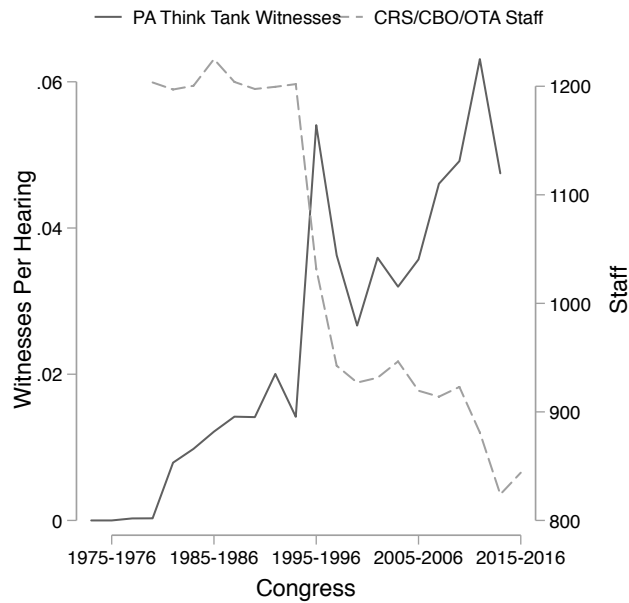


Figure 5.7: Party-Aligned Think Tank Witnesses Per Hearing and CBO, CRS and OTA Staff, 1973-2016

The cuts to Congressional staff was even more severe. Figure 5.8 shows the trends in committee staff and party-aligned think tanks per hearing during the same period. Members of Congress have two types of staff: personal staff and committee staff.

Most personal staff focus primarily on constituency services and communication, while committee staff tend to be more focused on substantive policy concerns (Baumgartner and Jones 2015). Much of the specialized knowledge in Congress lies with professional committee staff, who develop long-term relationships with stakeholders, bureaucrats and experts (Krehbiel 2006). Formal caucuses also lost nearly all of their professional staff. These organizations provided considerable information to members of Congress, often addressing local concerns that cut across party lines (Ainsworth and Akins 1997; Ringe, Victor, and Gross 2013; Victor and Ringe 2009).

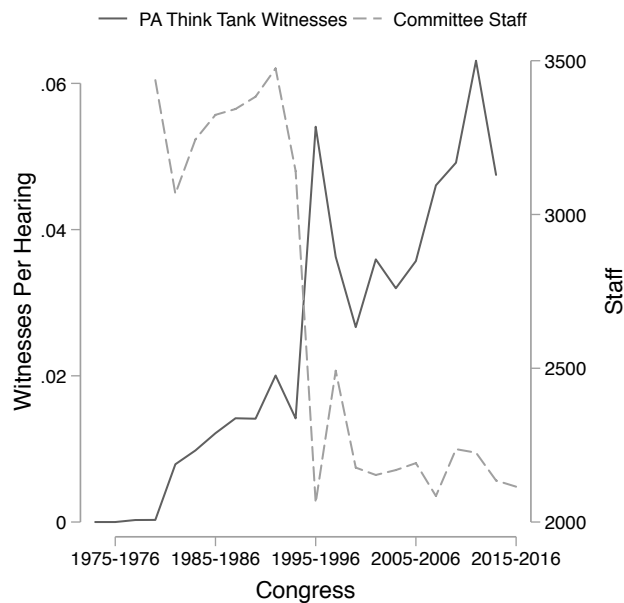


Figure 5.8: Party-Aligned Witnesses Per Hearing and Committee Staff, 1973-2016

Congress lost about a third of these staff to the 1995 cuts, forcing individual members to rely on other information sources. One of these were increased staff in party

leadership offices, who sought to centralize control over policy and legislative information (Curry 2015; Lewallen, Theriault, and Jones 2016). They also were forced to rely upon more external information sources, either in the executive branch (Mills and Selin 2017) or outside of government entirely (Baumgartner et al. 2009; Rich 2005). The result was a decline in Congress' ability to search for and define problems, identify solutions, and ultimately take action to pass laws (Glastris and Edwards 2014; Jones, Theriault, and Whyman 2019; Lewallen, Theriault, and Jones 2016).

Conservative Republicans saw the decline of Congressional capacity as a feature, rather than a bug or just a side effect of reducing costs. A legislature with a reduced ability to search for policy problems will pass less legislation to solve those problems, reducing the size of the government's policy agenda (Baumgartner and Jones 2015). While the Republican rhetoric in the Contract with America focused on over-spending in Congress, earlier work made it clear that their goal was to reduce Congressional capacity to process information. In an influential 1989 book, two Heritage Foundation authors argued that an "Imperial Congress" had stymied public mandates given to Republican presidents Richard Nixon⁴⁹ and Ronald Reagan to reduce the size and scope of government, and it needed to be cut back in order to maintain the separation of powers (G. S. Jones and Marini 1988). Newt Gingrich, then the Republican Minority Whip, wrote the book's foreword. These ideas were eventually incorporated into a promise in the Contract with America to cut staffing (Gayner 1995).

⁴⁹ The book ignores the degree to which the expansions of government under Richard Nixon were by Nixon himself, rather than the Democratic-controlled Congress (see B. D. Jones, Theriault, and Whyman 2019).

Thus, the reduction of Congressional capacity represents an important confounding variable in our analysis. Congress may not have sought out more partisan information, but rather more information from outside of government to compensate for losses in staff. A reduction in capacity for rank-and-file members of Congress (as opposed to leadership) could increase polarization, as they become forced to rely on the judgment of party leaders (Curry 2015). We can test for this potential confounding variable by examining trends in testimony from external non-partisan information sources. While the data structure does not allow us to search for all sources of non-partisan information, we can collect data on individual organizations. I selected four organizations to measure demand for external non-partisan policy analysis. The first three, Harvard, Stanford and Yale, were leading research universities during the entire period. The fourth, the Brookings Institution, is the leading non-partisan think tank in the United States (McGann 2019). Figure 5.9 compares frequency of testimony per Congressional hearing of these organizations and the four party-aligned think tanks. During this same period, all three universities saw significant declines in testimony. As a group, they declined from 0.07 witnesses per hearing to 0.03 witnesses per hearing. All three universities declined by at least 50%. Brookings Institution testimony was stable, ranging between 0.01 and 0.02 witnesses per hearing. These data suggest that Congressional demand for external non-partisan information decreased during this period. Therefore, demand for external information in general is unlikely to be a confounding variable causing both demand for party-aligned think tank information and polarization. Indeed, if Congress consumes more party-aligned think tank information

and less non-partisan information, the impact of party-aligned think tank information should be greater than if non-partisan information was stable as the balance of the overall information environment becomes even more partisan.

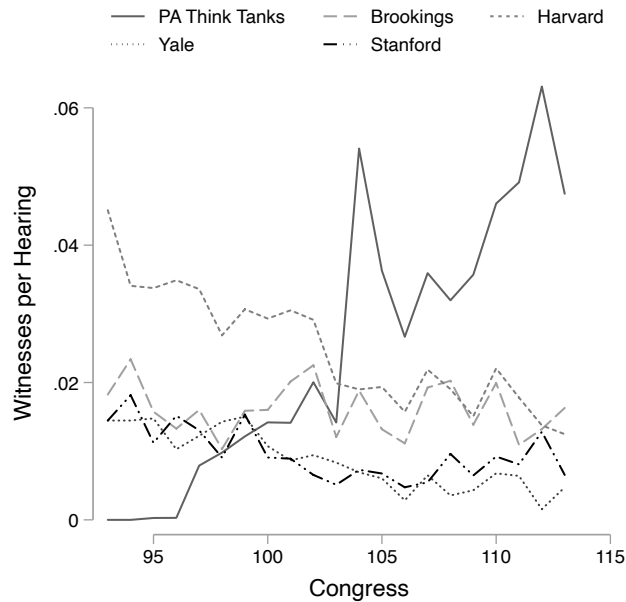


Figure 5.9: Party-Aligned Think Tank Witnesses Per Hearing and Selected Non-Partisan Witnesses Per Hearing

We can conclude from these results that conservative Republicans chose to not only cut Congressional capacity to process information, but to also replace it with partisan information. Indeed, the same process has played out in U.S. states. States with lower legislative professionalism are more likely to pass laws supported by the American Legislative Exchange Council (ALEC), and conservative corporate-funding interest group, Americans for Prosperity, a conservative organization funded by the Koch

Brothers, and the State Policy Network, a group of state-based conservative think tanks (Hertel-Fernandez 2019).

SUMMARY

This chapter examined the relationship between party-aligned think tanks and polarization in Congress from the beginning of the polarization period to the present day. Parties in Congress began to polarize in the late 1970s, long before the public became intensely polarized. While scholars have identified certain factors that enabled or contributed to elite polarization, such as the slow realignment of Southern Democrats into the Republican Party, conflict extension to new issues, increased partisan competition and changes to rules and procedures, much of the process remains difficult to explain. In this chapter, I theorized that much of the increase in polarization was caused by the persuasion of elites by party-aligned think tanks. As these organizations displaced the old non-partisan knowledge regime, members of Congress adopted more extreme preferences.

Using time series analysis of party-aligned think tank outputs and polarization, I found a strong and positive association between the activities of party-aligned think tanks and polarization in Congress. As the Heritage Foundation grew larger in terms of revenue, Congress became more polarized. As all four party-aligned think tanks were called to testify more frequently before Congressional hearings, Congress also became more polarized. Both of these trends hew closely to the shape of the change in polarization and come slightly earlier, suggesting that a causal connection is plausible.

While news citations also increased during the time period, the relationship is more likely to be spurious.

I also tested an important alternative explanation for the relationship between polarization and party-aligned think tank information. Congress significantly cut much of its own capacity in the mid-90s and early 2010s, periods in which both party-aligned think tank activity and polarization also spiked. If these cuts caused polarization to increase independently but also increased demand for external information processing, they could create a spurious relationship between party-aligned think tanks and polarization. However, non-partisan external information appeared to decrease during this period, rather than increase, allaying these concerns.

Chapter 6: Measuring Polarization Across Issues

Most political scientists studying polarization on Congress, including the analysis in Chapter 5, estimate polarization across all roll call votes using DW-NOMINATE scores (Lewis et al. 2019). Scholars may also seek to estimate polarization across individual issues in order to understand the processes that influence polarization in Congress. In the Chapter 7, I use these data to examine the relationship between party-aligned think tanks and polarization. However, measuring polarization across issues presents significant challenges. This chapter examines the problems associated with doing so, solves many of those problems and finally introduces new data on polarization across issues.

Chapter 6 proceeds as follows. In the first section, I examine the problems associated with measuring polarization across issues. I begin by reviewing the brief literature where scholars attempted to do so. I argue that scaling estimation procedures like DW-NOMINATE scores will struggle to estimate polarization across issues in smaller time periods. Instead, I use party disagreement scores, an older and simpler operationalization that can measure polarization in shorter time periods. Next, I argue that an accurate measure of polarization across issues that we must include both roll call votes and legislation that passes with non-roll call processes, such as suspension of the rules, unanimous consent or voice vote procedures. I introduce a new procedure to locate laws that passed either chamber without a roll call vote. Finally, I explore the data, finding interesting variation in polarization across time and issues.

MEASURING POLARIZATION ACROSS ISSUES

In order to measure polarization of outputs across issues, we must first select a system to categorize outputs into issues. I use the topic doing scheme from the Policy Agendas Project⁵⁰ (PAP) (Baumgartner, Jones, and Wilkerson 2002). PAP is a collaboration between dozens of scholars across countries to categorize the issue content of policy outputs using a system that allows for valid comparisons across time and context. The PAP system assigns each policy output to one of 20 major topic areas,⁵¹ such as energy or defense policy, and one of 220+ subtopic areas, such as nuclear energy and weapon sales. The U.S. Policy Agendas Project has coded over a dozen datasets of policy outputs over long time series, allowing us to relate polarization across issues to the activities of political parties, media, Congress, the public, and the presidency. For this chapter, I used the PAP roll calls and public laws datasets.⁵²

While numerous scholars have focused on polarization increasing on individual issues or groups of issues (for example, see: Karol 2019; Layman and Carsey 2002; Lindaman and Haider-Markel 2002), only a handful of scholars have attempted to measure polarization across the 20 PAP major topics. Jochim and Jones (2013) examined changes in polarization across policy topics and time. They use a scaling procedure

⁵⁰ The Policy Agendas Project (PAP) is related to the Comparative Agendas Project (CAP). PAP was created by Baumgartner, Jones and Wilkerson to measure the issue content of U.S. policy outputs. Scholars in other countries later created their own projects using the PAP topic coding system. Eventually, these individual country projects, including the U.S. project, organized to create CAP. The U.S. CAP project refers to itself as PAP but can also be accurately identified as the U.S. Comparative Agendas Project.

⁵¹ The CAP codebook defines one additional major topic area, culture policy. Because few such observations are present in U.S. data, the PAP codebook defines these observations as an education policy subtopic.

⁵² These datasets are available online at www.comparativeagendas.net/us

similar to NOMINATE to compare the dimensionality of issues. Due to the large number of roll call votes necessary to use the scaling procedure, they estimate change in dimensionality across two periods of fifteen years each. They find that most of the increased polarization occurred in a handful of major topics: education, science and communication, public lands, transportation, health care and business, while the other topics did not change significantly. Thus, they attribute increased polarization to increased disagreement over specific issues, rather than general partisanship. Lee (2009) uses party disagreement scores to measure cross-sectional polarization across issues and substantive, procedural or parliamentary votes. She finds considerable variation in party disagreement by policy topic, although disagreement goes up on all policy topics when votes move from substantive to procedural or parliamentary. Thus, Lee attributes the bulk of increased polarization to general partisanship, rather than increased policy differences.

Most modern political science studies use the difference of party means in the first dimension of DW-NOMINATE to measure polarization in Congress (Lewis, Poole and Rosenthal 2019). However, DW-NOMINATE scores are a poor tool to measure polarization across issues, as it requires a large number of annual observations to estimate the difference between party means. Modern Congresses hold between 1,500 and 2,000 roll call votes over each two-year period. When these votes are broken up into 20 issue categories, some of which contain many more votes than others, the bins become very small. For example, the 112th Congress (2011-2012) held the most votes on energy issues in decades with just 176 roll calls, while the previous Congress held just 55. More votes

are necessary to calculate a reliable scaled variable. Instead, I follow Lee (2009) and use party disagreement scores, which require many fewer observations to reliably estimate.

Party disagreement scores are calculated using equation 6.1. The party disagreement score of roll call vote i is defined as the absolute value of the proportion of Democrats voting yea minus the proportion of Republicans voting yea. If all members of one-party vote yea and no members of other party do, the score is 1. If the same proportion of each party vote yea, the score is 0. I drop abstentions, missed votes and third party or independent members. A value of 0 indicates that the parties voted Aye in equal proportions. As the score increases, it indicates greater differences between the parties. A score of 1 represents a strictly party-line vote.

Equation 6.1: Party Disagreement Score Formula

$$D_i = \left| \frac{Y_d}{V_d} - \frac{Y_r}{V_r} \right|$$

Next, I improve upon existing measures of party disagreement across issues by incorporating laws passed without roll call votes. Both traditional party disagreement scores and DW-NOMINATE scores overstate the amount of polarization in the legislative process because they only measure party conflict in roll call votes. Congress processes only some of its legislation through roll call voting. Chambers pass the majority of legislation using voice votes or unanimous consent mechanisms (Clinton and Lapinski 2008).⁵³ Laws are more likely to pass using these procedures when they are less

⁵³ There are various processes through which a chamber can approve the final passage of a law without individual members recording their expressed preferences with a roll call vote, such as asking for unanimous consent or for a voice vote. For the sake of simplicity, I refer to all of these processes as “voice votes.”

important, involve particularistic goods, and in the second session of each Congress (Clinton and Lapinski 2008). They were most common during the textbook Congress era and have declined since (Shepsle 1989). While they are used more commonly for less important legislation, many laws that are approved by voice vote are substantively meaningful. For example, in late December 2018, the 115th Congress used voice votes to approve reauthorizations of the National Flood Insurance Program, Public Health Services Act and Museum of Library Services Act, a major reform of sexual harassment policies in Congressional offices, an expansion of reporting requirements for electronic service providers in child sexual abuse and child pornography cases, funding for new unmanned marine weather data collection systems, new program to care for Alzheimer's patients, several bills providing benefits to veterans, \$1.5 billion in additional foreign aid to East Asian countries threatened by China and North Korea, and a major reform to juvenile justice systems. While party leaders may use voice votes to prevent their members from having to take a tough vote on the record, neither party objected to using voice votes to pass a law, and thus there is little meaningful party conflict on it. They are also all absent from analyses of polarization of roll call votes. Their absence will inflate the overall level of polarization. If voice votes are unevenly distributed across issues, they will bias estimates of polarization across issues.

I measured voice votes on final passage by inference, using a similar procedure as Clinton and Lapinski (2008). I started with the U.S. Policy Agendas Project laws and roll call votes datasets. These contain all laws or roll call votes passed by Congress between 1973 and 2018. During this time, Congress passed 11,068 public laws and held 43,272

roll call votes.⁵⁴ In each chamber-Congress pair, I searched for the bill number of each non-commemorative law in the roll call votes data. Where no roll call vote was record, I inferred that the law was passed in the chamber using a voice vote procedure.⁵⁵ This process yielded 5,431 laws passed by voice vote in the House and 7,616 in the Senate between 1947 and 2018. Note that this process excludes bills passed by voice vote but not signed into law, bills that passed the chamber but were folded into other public laws before final passage, and non-legislative voice votes such as on nominations. Figure 6.1 plots these votes over time in the House and Senate. We see that the House and Senate each passed hundreds of laws annually using voice votes but trending downward since 90th Congress (1967-1969). Voice votes decreased in the House faster than the Senate for most of the period. A second large drop-off occurred when Republicans took control of the House of Representatives in the 2010 midterm election, although the House did rebound in the 115th Congress. I calculated an adjusted party disagreement score where each voice vote was assigned a score of zero disagreement.

⁵⁴ Note that some laws receive roll call votes in one chamber but are passed through voice votes in the other chamber.

⁵⁵ I drew a random sample of 25 of these inferred voice votes to and checked them by hand. All 25 were correctly identified as voice votes.

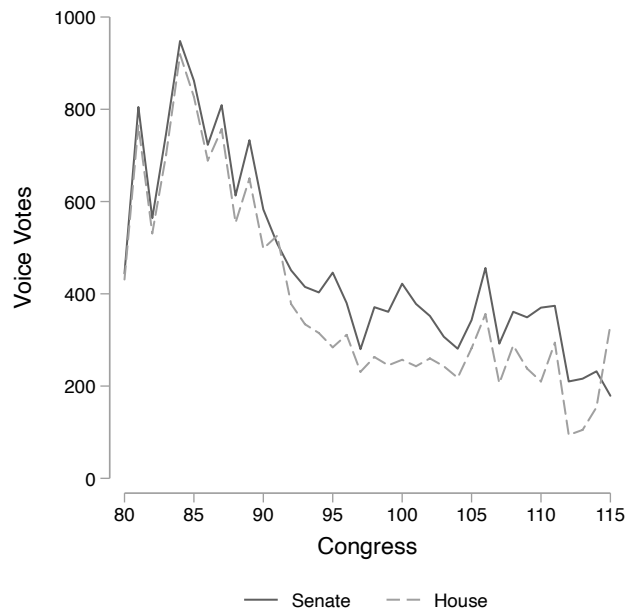


Figure 6.1: Laws Passed without Roll Call Votes in the House and Senate, 1947-2018

Next, I validate voice-vote adjusted party disagreement scores as a valid measurement of polarization in Congress. Party disagreement scores, adjusted for voice votes or not, should be highly correlated with existing methods of measuring polarization like DW-NOMINATE. Figure 6.2 compares the average party disagreement score, voice-vote adjusted party disagreement score and DW-NOMINATE difference of party means for both chambers of Congress from 1973-2018. The three series are closely related. All three begin accelerating during the 96th Congress (1979-1980), sharply increase around the 104th Congress (1995-1996), and further after the 112th (2011-2012). These results strongly suggest that party disagreement scores, both adjusted for voice

votes and unadjusted, are a strong substitute for DW-NOMINATE difference of means as a method for measuring polarization in Congress.

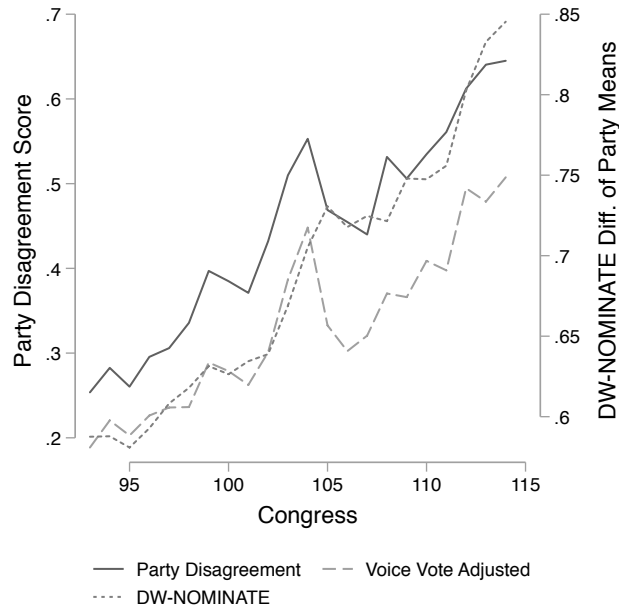


Figure 6.2: Comparison between party disagreement scores, voice-vote adjusted scores, and DW-NOMINATE, 1973-2018

Table 6.1 shows the correlations between the three variables for each chamber and the average of both chambers. The unadjusted party disagreement scores and adjusted disagreement scores are almost perfectly correlated ($\rho = 0.98$ for both chambers averaged). Thus, while the inclusion of voice votes changes the y-intercept of party disagreement scores, it does little to change the trend in polarization over the time series. Excluding laws passed by voice vote increases party disagreement scores by about 0.15. We can examine how voice votes change the overall distribution of party disagreement scores by plotting each vote or law's score on a histogram. Figure 6.3

shows the distribution of party disagreement scores of just roll call votes in the House of Representatives. The distribution is bimodal, with zero or close to zero disagreement being the modal outcome. The second most common outcome is a party-line vote, with about half as many observations as zero disagreement votes. Votes are mostly evenly distributed in between the two polls, with a slight uptick approach each poll. Figure 6.4 shows the distribution once voice votes are added in. Zero disagreement votes now dominate the distribution, at about four times the number of party line votes. Overall, these results suggest that the level of polarization in Congress is significantly overstated by analyzing just roll call votes, while an analysis of the change in polarization over time using just roll call votes is accurate.

	<i>House</i>		
	Adjusted	Unadjusted	DW-NOMINATE
Adjusted	1		
Unadjusted	0.83	1	
DW-NOMINATE	0.84	0.99	1
	<i>Senate</i>		
	Adjusted	Unadjusted	DW-NOMINATE
Adjusted	1		
Unadjusted	0.96	1	
DW-NOMINATE	0.82	0.76	1
	<i>Congress</i>		
	Adjusted	Unadjusted	DW-NOMINATE
Adjusted	1		
Unadjusted	0.98	1	
DW-NOMINATE	0.94	0.92	1

Table 6.1: Correlations Between Party Disagreement Scores, Voice-Vote Adjusted Party Disagreement Scores, and DW-NOMINATE Difference of Means, 1973-2018

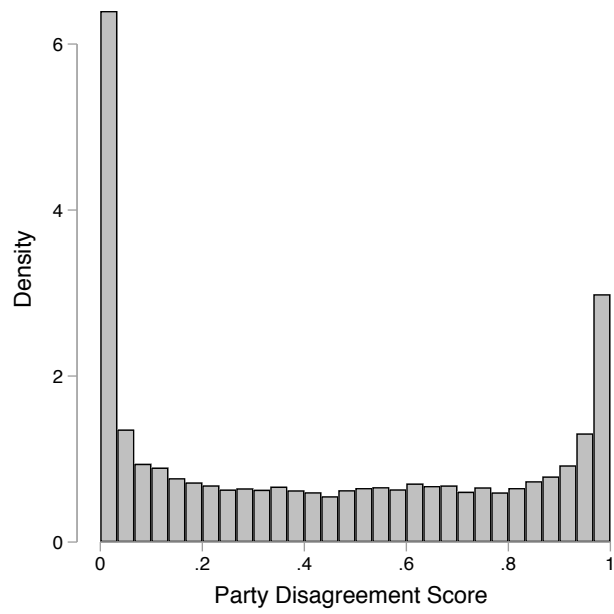


Figure 6.3: Distribution of Party Disagreement of Roll Calls, House of Representatives

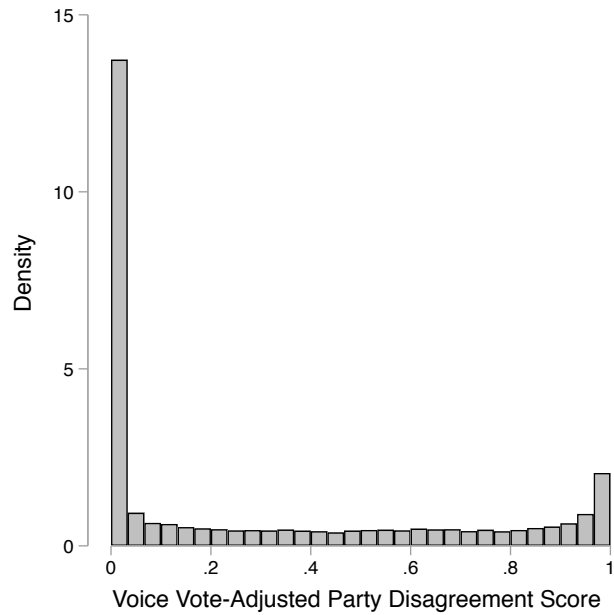


Figure 6.4: Distribution of Party Disagreement of Roll Call and Voice Votes, House of Representatives

Next, I apply these results to measuring polarization across issue areas. If voice votes are unevenly distributed among issue areas, excluding them from party disagreement scores will change the overall distribution of polarization across issue areas. Unadjusted party disagreement scores will overstate polarization in policy topics that over-index voice votes and understate polarization in policy topics that under-index voice votes. Figure 6.5 shows the distribution of voice votes and roll call votes by policy topic during the 1947-2018 period. Six policy areas, civil rights, macroeconomics, labor, energy, foreign affairs, social welfare and education, each have a ratio greater than 3:1 roll call votes to voice votes, with civil rights having a nearly 10:1 ratio. On the other end of the spectrum, law and crime, agriculture, trade, transportation and public lands each have a ratio of 1.6:1 or fewer roll call votes to voice votes, with public lands as the outlier with 0.38:1 roll call votes per voice vote. Thus, excluding voice votes would make the former group appear less polarized than they are relative to other issues and vice versa for the latter group. If voice vote practices change over time, this cross-sectional variation can also bias change in polarization across time periods.

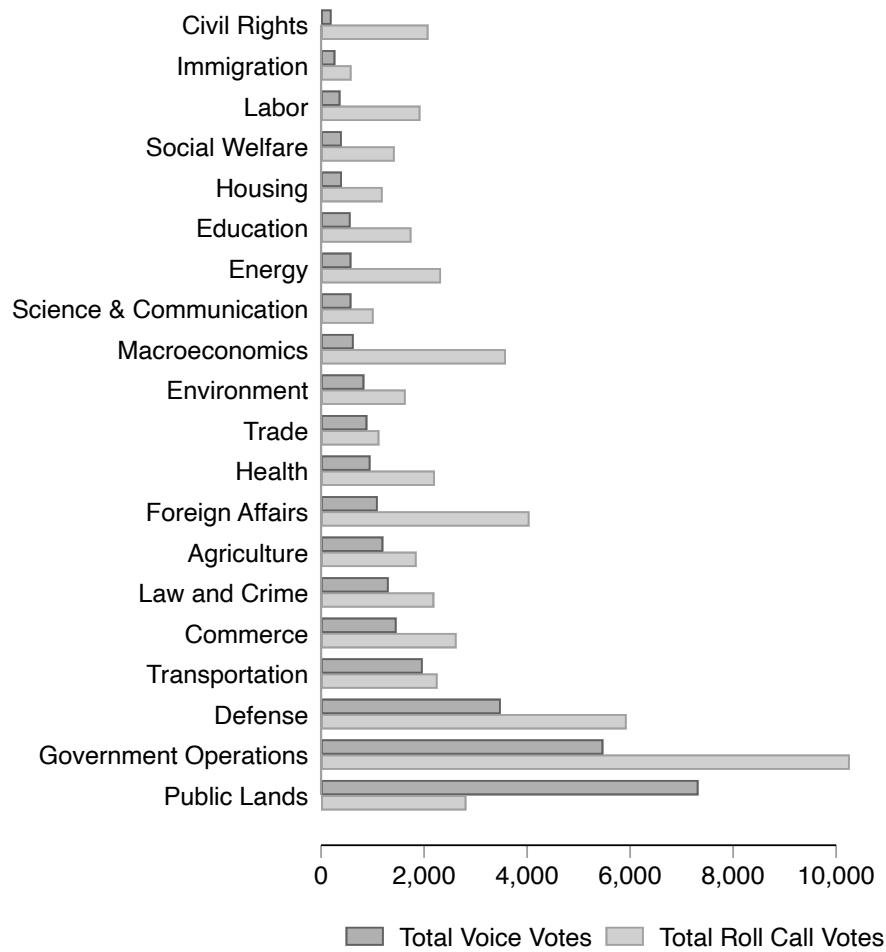


Figure 6.5: Total Laws Passed by Voice Vote and Total Roll Call Votes in Congress, 1947-2018

We can see these results play out across time by comparing the two different party disagreement scores across all 20 policy topics from 1947-2018 in Figure 6.6. Unlike the time series compared in Figure 6.2, we see that the two series often diverge over time, likely due to changing voice vote practices. Issues like domestic commerce, health care, law and crime, agriculture, and environmental policy go through long consensual periods

where Congress is passing a large number of laws via voice vote. Adjusted and unadjusted party disagreement scores are correlated at less than 0.70 on all of these policy topics (see Table 6.2). Other issues, such as civil rights, labor, foreign affairs, defense, and social welfare are correlated at greater than 0.90 during the same period. Thus, we should also include voice votes in analyses of change in polarization across issues and time, even though it is not necessary to include them in analyses of overall polarization in Congress.

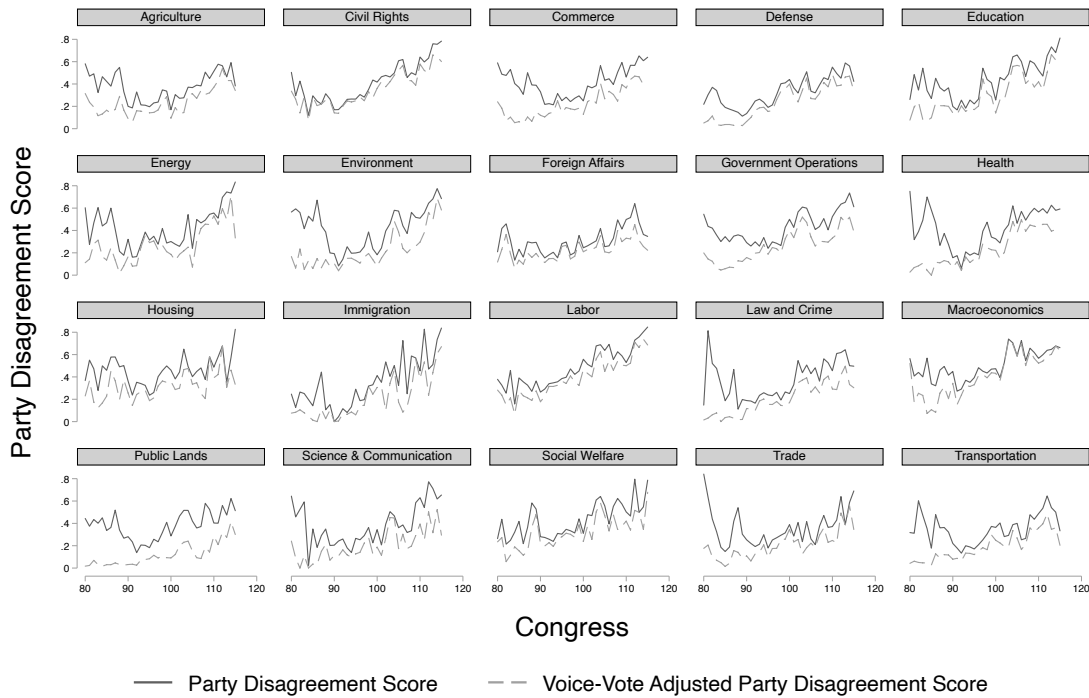


Figure 6.6: Comparison between voice vote-adjusted party disagreement scores and unadjusted party disagreement scores, 1947-2018.

Policy Topic	Rho
Trade	0.56
Health	0.57
Law and Crime	0.57
Transportation	0.6
Public Lands	0.63
Commerce	0.65
Housing	0.67
Environment	0.70
Energy	0.72
Agriculture	0.74
Science & Communication	0.75
Immigration	0.79
Government Operations	0.81
Macroeconomics	0.86
Education	0.87
Social Welfare	0.87
Defense	0.91
Foreign Affairs	0.93
Civil Rights	0.94
Labor	0.96

Table 6.2: Intra-Topic Correlation Between Voice-Vote Adjusted and Unadjusted Party Disagreement Scores, 1947-2018

Finally, we can now explore these data descriptively to understand the variation in polarization across issues. Table 6.7 shows the mean annual voice vote-adjusted party disagreement score across each of the 20 policy topics from 1947-2018. We see considerable variation between the policy topics. The most polarized issues tend to subjects of what (Gerring 2001) calls the “Great Debate” between those who favor greater redistribution and government intervention into domestic economic policy and those who favor less. These issues—labor, macroeconomics, social welfare, housing and education—often define the traditional left-right spectrum in both American politics and other party systems. On the other end of the spectrum, issues with local dimensions, such as public lands, transportation and law and crime, and issues that emerged during the 20th

century, such as science, technology and communication and environmental policy, tend to be far less polarized on average during the full 1947-2018 period.

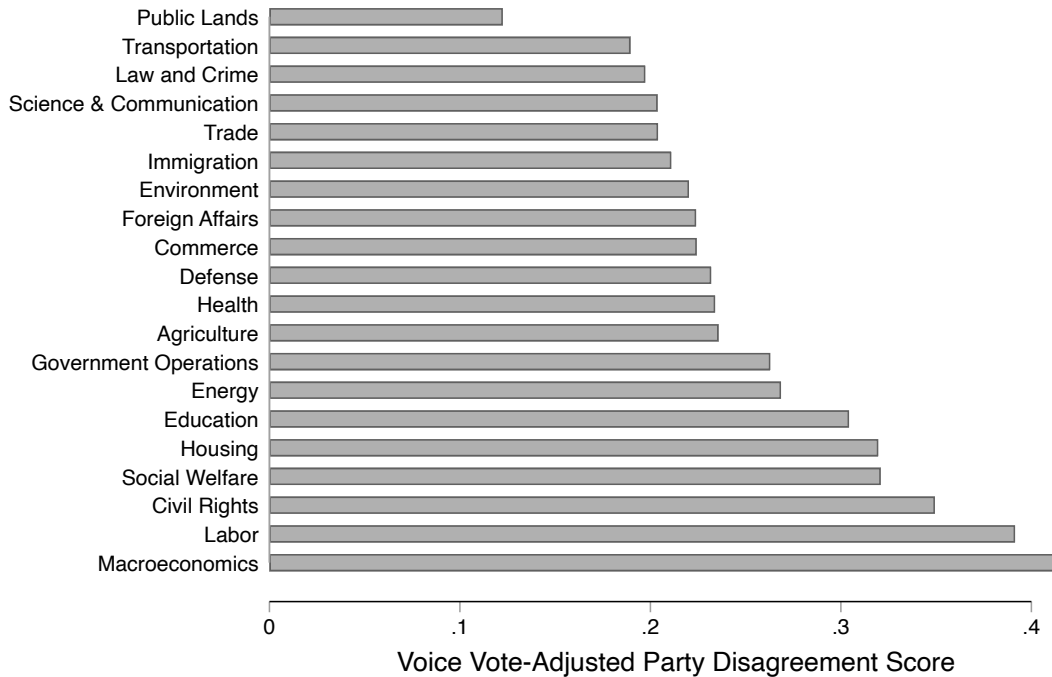


Figure 6.7: Mean Annual Voice Vote-Adjusted Party Disagreement Score by Policy Topic, 1947-2018

While every issue has become more polarized over time, the rate of increase varies considerably between issues. Figure 6.8 plots the change in voice vote-adjusted party disagreement from the early 1970s to present day. During this time, overall polarization as measured by party disagreement scores more than doubled, from an average of about 0.20 to about 0.50 (see Figure 6.2). However, some issues changed considerably more or less than the average. Table 6.3 shows the slope of a trend variable regressed on the time series for each issue. We see that environmental policy polarized at

the fastest rate, reflecting the rapid shift from environmental policy as a bipartisan consensus issue to one defined by sharp conflict (Karol 2019). Energy, immigration, civil rights and education policy also became more sharply polarized. On the lower end, we see that defense, foreign affairs and trade policy all polarized at a much slower rate. This slower rate of change suggests that the bipartisan consensus on foreign policy remains strong, although it is not immune to the forces polarizing politics generally. Overall, these results support that both the Lee (2009) and Jochim and Jones (2013) stories: forces are both increasing the general level of partisanship in Congress, but much of the change also appears to be related to increased conflict on certain issues.

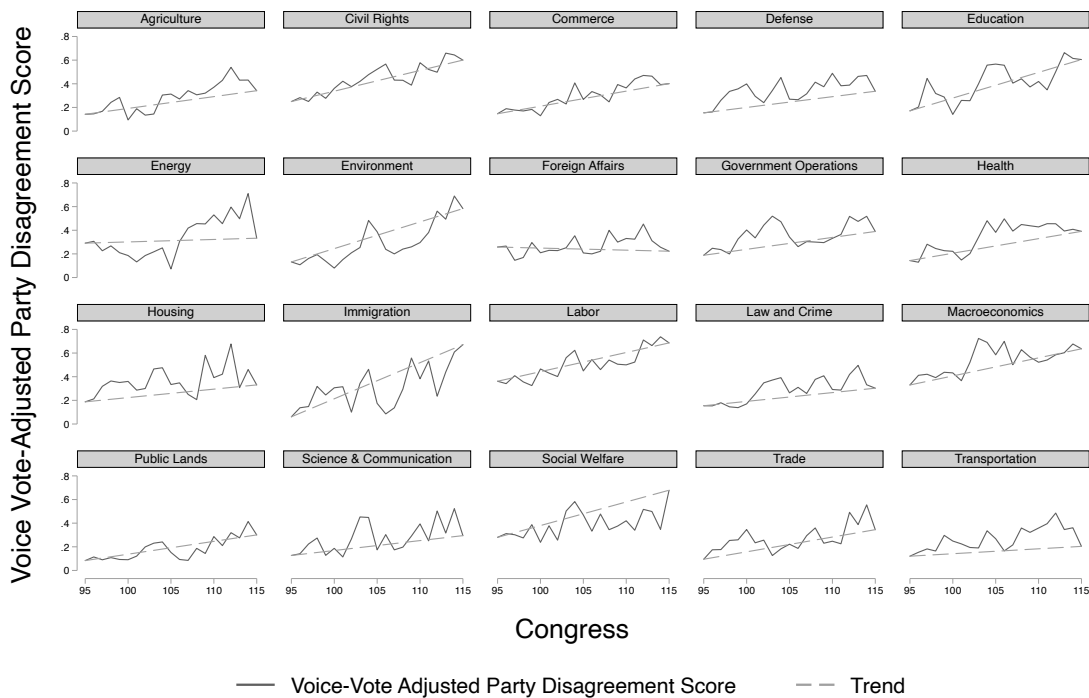


Figure 6.8: Change in Voice Vote-Adjusted Party Disagreement Over Time by Issue, 1973-2018

Policy Topic	Slope
Environment	0.023
Energy	0.019
Immigration	0.019
Civil Rights	0.018
Education	0.018
Labor	0.017
Agriculture	0.016
Finance and Commerce	0.016
Health Care	0.015
Housing	0.014
Macroeconomics	0.013
Law and Crime	0.012
Public Lands	0.012
Transportation	0.011
Science and Communication	0.011
Social Welfare	0.011
Defense	0.01
Government Operations	0.009
Trade	0.009
Foreign Affairs	0.005

Notes: Slope represents the beta coefficient returned when voice vote-adjusted party disagreement scores are regressed on a trend variable

Table 6.3: Change in Voice Vote-Adjusted Party Disagreement Over time by Issue, 1973-2018

SUMMARY

This chapter introduced a new dataset on polarization across issues from 1947-2018. Scholars after often interested in variation between polarization across issues but have been limited by data availability. Scaling methods like DW-NOMINATE scores struggle to estimate polarization of roll call votes across issues in a time series due to

small subgroup sizes. I solve this problem using party disagreement scores, which other scholars have used to measure the average proportion of each party in a chamber voting in opposition to the party. I add to the existing literature by incorporating laws that were signed into law but passed either or both chambers without a roll call vote. Throughout much of modern Congressional history, most laws passed using voice votes, unanimous consent, or other consensus procedures in one or both chambers. While these laws are on average less salient than laws passed with roll call votes, large and important legislation often passes without roll call votes. Because the use of these procedures is unevenly distributed across issues, I show that any measurement of polarization across issues must include them.

Next, I briefly explored the data. There is considerable cross-sectional variation in the average polarization across issues during the full time period. Less polarized issues like public lands, transportation and law and crime are approximately half as polarized as issues like macroeconomics, labor and civil rights. Issues have also become more polarized at different rates over time. While all issues became more polarized after the 1970s, party conflict on some issues grew dramatically. Environmental policy, energy and immigration policy polarized three-to-four times faster than foreign affairs, trade and government operations.

These data will allow researchers of Congress and public policy to answer research questions that they were unable to answer previously. In Chapter 7, I use them to examine the impact of one treatment effect, party-aligned think tank activity, on issues in Congress. However, other scholars could use them to examine other treatment effects. Presidential attention to issues may increase polarization (Lee 2009). The incorporation of interest groups into party coalitions may increase polarization by expanding the scope of conflict on an issue (Fagan, McGee, and Thomas 2019). Intense media coverage of

issues may increase polarization by increasing anti-partisan dislike of the other party's positions or it may decrease polarization by encouraging voters to moderate their own positions (Levendusky and Malhotra 2016). Parties may take time to sort out issue positions after new issues emerge (Jones, Theriault and Whyman 2019). Finally, comparative studies may also find that issue polarization tends to be correlated across party systems, suggesting that the qualities of the issues themselves lead to polarization, rather than a treatment effect.

Chapter 7: Polarization and Party-Aligned Think Tanks Across Issues

In Chapter 5, I established a strong and robust relationship between party-aligned think tanks and polarization in Congress. As party-aligned think tanks became larger and testified more frequently before Congress, polarization increased. These changes coincided with reductions in Congressional capacity, but similar non-partisan organizations did not see a similar increase in influence in Congress. However, these results are limited by the monotonically increasing nature of the polarization trend since the 1970s. We can solve this problem by breaking Congressional activity up into individual issues and comparing polarization and party-aligned think tank activity on those issues. By doing so, we can examine many individual cases, rather than one history. This chapter uses the data on polarization of issues from Chapter 6 as well as new data on the activities of the four party-aligned think tanks to do so, finding a strong and robust relationship between the two variables.

The generalized causes of issue polarization remain largely unexplored by political science. Numerous scholars have examined the causes of party conflict on individual issues such as environmental policy (Karol 2019), education policy (Haas 2007), health care (Hertel-Fernandez 2016), labor market policy (Hertel-Fernandez 2018) and women's rights (Wolbrecht 2000). These studies tend to offer specific explanations of polarization across each issue area, rather than a generalized explanation of the variation in polarization across issues. They also tend to focus on issues of current or traditional partisan conflict while ignoring less salient, less conflictual issues like

transportation policy, public lands and science and technology. These issues often make up a larger portion of the Congressional agenda than many of the other issues studied, but rarely receive attention from scholars of polarization and party positions.

There is also little scholarly literature examining the variation in levels of polarization across issues. Jochim and Jones (2013) use procedures similar to DW-NOMINATE to estimate the number of dimensions present across issues over time. As issues are reduced to a single dimension, they become more polarized. They find considerable variation in polarization across issues during both the less polarized period (1965-1980) and the more polarized period (1981-2004). Further, they find that increases in polarization were concentrated in about a third of issue areas, while the majority of issues did not change significantly. Lee (2009) finds that issues become more polarized when the President takes a position on the vote thus raising its profile. Jones, Theriault, and Whyman (2019) find that the parties do not immediately incorporate emerging issues into their platforms, suggesting a brief period of low levels of polarization on new issues before the parties eventually diverge.

This chapter is divided into two sections. In the first section, I introduce four datasets on party-aligned think tank activities across issues from 2004-2016. These are white papers drawn from think tank websites, testimony by party-aligned think tanks in hearings, citations of think tanks by name in the Congressional Record, and bills mentioned in lobbying disclosure reports. These outputs measure a range of activities: information production, use of information by members of Congress and active lobbying

by think tanks. Finally, I briefly explore the distribution of think tank attention in each output.

In the second section, I first compare attention to policy by party-aligned think tanks for each output with polarization across issues during the full 2004-2016 period. I find a strong and robust positive relationship between polarization and think tank issue attention. Next, I explore some potential confounding omitted variables in issue salience and issue ownership. I find no evidence that they create a spurious relationship between polarization and party-aligned think tank attention, although I note the limitations of testing these relationships cross-sectionally. Finally, I examine the dynamic relationship between issue attention and polarization across both time and issues, finding a robust long-term relationship but little evidence of a short-term relationship between the parties.

MEASURING PARTY-ALIGNED THINK TANK ACTIVITY ACROSS ISSUES

In order to measure the distribution of attention to issues in party-aligned think tank activities, I collected data on the policy content of four different party-aligned think tank outputs. These outputs were white papers posted on the think tank websites, bills identified in lobbying disclosure reports, citations by members of Congress in the Congressional Record and testimony before Congressional hearings. For each output, I measured both the absolute levels of policy attention from party-aligned think tanks and attention relative to a comparative Congressional output. In this section, I first explain the content analysis methods used to identify their policy content. I then lay out how each output was collected, coded and compared to baseline levels of Congressional attention.

I coded each output for its policy content using the Policy Agendas Project (PAP) topic coding system. PAP is a collaboration between dozens of scholars across countries to categorize the issue content of policy outputs using a system that allows for valid comparisons across time and context. The PAP system assigns each policy output to one of 20 major topic areas, such as energy or defense policy, and one of 221 subtopic areas, such as nuclear energy and weapon sales. The U.S. Policy Agendas Project has coded over a dozen datasets of policy outputs over long time series, allowing us to relate U.S. think tank outputs to the activities of political parties, Congress, the public, and the presidency. Table 5.1 shows the 20 PAP major topic areas,⁵⁶ along with examples of party-aligned think tank white papers coded under each. Each output was assigned to a single topic area. If an output contained policy content in multiple topic areas (for example, a report on the fiscal health of Medicaid and Social security), it was assigned to a single topic area based upon the rules of the PAP codebook.

⁵⁶ The international CAP system uses a twenty-first major topic, cultural policy, that is not used in the U.S. codebook, and thus not used for this project.

Major Topic Area	Example
Macroeconomics	"A Territorial Tax System Would Create Jobs and Raise Wages for U.S. Workers" - Heritage Foundation
Civil Rights	"The Unintended Consequences of Section 5 of the Voting Rights Act" - American Enterprise Institute
Health	"Health Reform Law Makes Clear That Subsidies Will Be Available in States with Federally Operated Exchanges" - Center on Budget and Policy Priorities
Agriculture	"Food Safety: Background, Analysis and Recommendations" - American Enterprise Institute
Labor	"Real Family Values: Raising the Federal Minimum Wage" – Center for American Progress
Education	"The Future of Teacher Compensation" - Center for American Progress
Environment	"Impact of the Waxman-Markey Climate Change Legislation on the States" - Heritage Foundation
Energy	"Electricity Pricing to U.S. Manufacturing Plants, 1963-2000" – American Enterprise Institute
Immigration	"The Senate Immigration Bill Rewards Lawbreaking: Why the DREAM Act Is a Nightmare" - Heritage Foundation
Transportation	"It's Time for States to Invest in Infrastructure" – Center on Budget and Policy Priorities
Law and Crime	"Changing Priorities: State Criminal Justice Reforms and Investments in Education" – Center on Budget and Policy Priorities
Social Welfare	"Would Private Accounts Provide A Higher Rate of Return than Social Security?" - Center on Budget and Policy Priorities
Housing	"Retrofitting Foreclosed Homes: A Matter of Public Trust" - Center for American Progress
Commerce	"Is There a Way to Create a Transatlantic Securities Market?" - American Enterprise Institute
Defense	"Afghanistan: Zero Troops Should Not Be an Option" - Heritage Foundation
Science and Communication	"Bundles of Trouble: The FCC's Telephone Competition Rules" – Heritage Foundation
Trade	"Global Value Chains and the Continuing Case for Free Trade" – American Enterprise Institute
Foreign Affairs	"A Plan B with Teeth for Darfur" – Center for American Progress
Government Operations	"Federal Pay is Out of Line with Private Sector Pay" – Heritage Foundation
Public Lands	"A Continued Push for Reform Is Needed on Public Lands' Energy Leasing" - Center for American Progress

Table 7.1: Comparative Agendas Project Major Topics and Think Tank Examples

White Papers

To measure attention to policy in party-aligned think tank information production, I collected data on their white papers from 2004-2016. Writing and disseminating research or policy arguments in the form of reports, books, explainers, and other documents is the heart of any think tank's mission. Each think tank in the sample produced thousands of white papers during this period on a wide range of policy issues. These documents varied in size. They ranged from a two-page analysis on a pending piece of legislation to a comparisons of cost estimates for a range of policy options to full economic analyses that would not be out of place in an academic journal. House styles varied by institution. For example, the Heritage Foundation tended to produce a greater number of shorter white papers focused on making arguments about policy but without much original research, while the American Enterprise Institute tended to produce fewer long white papers or books conducting original research.

I first collected all of the white papers listed on each think tank's website from 2004-2016. I collected the title, abstracts or summaries, and any available metadata listed under the website's "Reports" or "Research" section, using filters where available to eliminate blog posts, press releases, or other non-report outputs (see Figure 7.1 for an example). This yielded 14,255 reports. I then read each title and any available abstract or summary and assigned it to one of 20 Policy Agendas Project major topic codes.⁵⁷ If I

⁵⁷ Two trained graduate students coded a random sample of 500 observations using the procedures of the Policy Agendas Project. They agreed with the major topic codes assigned to these 86% of these data.

was unable to assign a code based on these shorter observations, I read the full report to determine which issue the report addressed and assigned it to a major topic area.

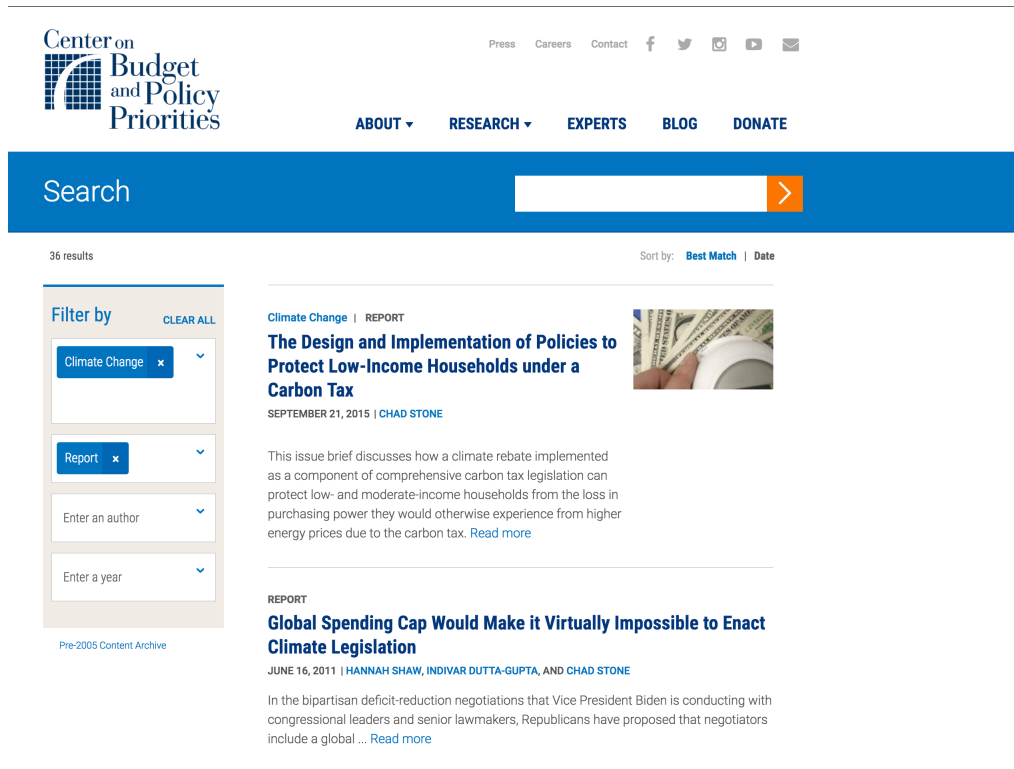


Figure 7.1: White Paper Data Collection Example

For each issue, I then measured the proportion of attention from each side's think tanks, weighted by each think tank's contribution by the organization's expenditures. This solves two problems. First, it allows us to account for each think tank's overall size. Larger think tanks have more party elites producing information for them. Second, it allows us to account for heterogeneity in the style of think tank reports. Some organizations, such as the Heritage Foundation, tend to produce more short issue brief-style reports, while others, such as the American Enterprise Institute, tend to produce

fewer longer white papers. If we simply counted the number of reports, we would overrepresent the longer reports. We would also count the total impact of organizations equally, even though we expect the larger organizations to be more influential. To solve both problems, I weighted the attention by the organization's annual expenditures using the formula in Equation 7.1.

Equation 7.1 Weighting of Think Tank Attention to Policy

$$Think\ Tank\ Attention_{ti} = \frac{\sum(\%Reports_{tij} * Expenditures_{tj})}{\sum Expenditures_{tj}}$$

Figure 7.2 shows the percentage of white papers assigned to each of the 20 major policy topics. We see huge variation in the issues that party-aligned think tank white papers address. Macroeconomics, defense, health care and foreign affairs collectively make up about 40% of all white papers. Public lands, agriculture, science and communication, and transportation all receive very small shares of issue attention. However, these raw numbers are difficult to interpret, because the government's policy agenda is distributed unevenly across categories. In order to adjust for the baseline demand for white paper-like information by Congress, I compared white paper attention to the policy content of Congressional Research Service (CRS) reports (see McGee and Fagan 2019). CRS is Congress' internal think tank. It provides detailed policy reports on a broad range of issues. Figure 7.3 shows the natural log of the ratio of the percentage of party-aligned think tank white papers to CRS reports. A positive result indicates that party-aligned think tanks devote relatively more attention to the issue, while a negative result indicates the opposite. Think tanks tend to focus on social welfare,

macroeconomics, health care, education, housing and civil rights when compared to CRS reports. With the exception of civil rights, these are all core issues of redistributive domestic economic policy. The ideological debate over these issues has remained constant since the middle of the 19th century, even as parties shifted their positions on other issues (Gerring 2001). On the other end of the spectrum, public lands, agriculture, science and communication and transportation policy receive relatively little attention. All of these issues have local dimensions and are fundamentally distributive, which may reduce the influence of nationally focused think tanks.

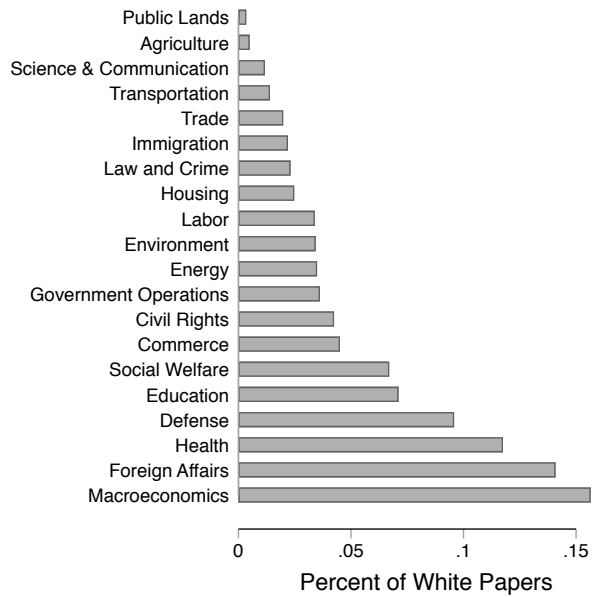


Figure 7.2: Distribution of White Paper Policy Attention

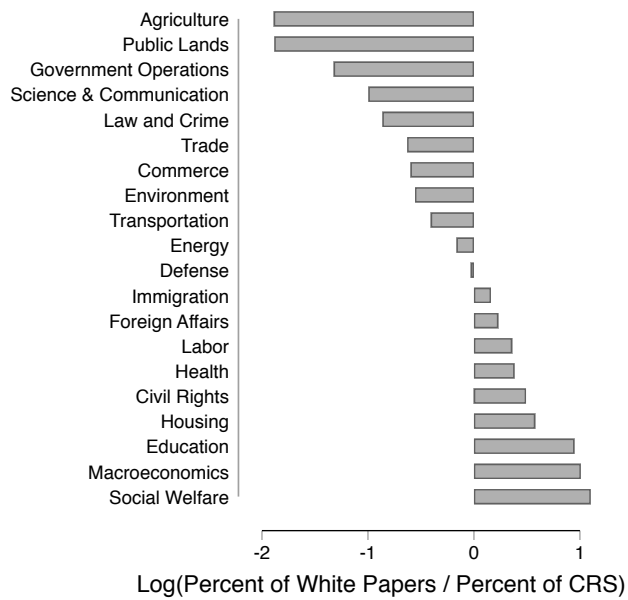


Figure 7.3: Distribution of White Paper Policy Attention Relative to CRS Reports

Congressional record citations

To measure the distribution of attention in Congressional consumption of party-aligned think tank information, I used think tank citations by members of Congress in the Congressional record. Members of Congress frequently make arguments about policy either on the floor of Congress or in committee. Their arguments often invoke various forms of policy analysis, including information from party-aligned think tanks. When they cite party-aligned think tanks, it indicates that they have both received the information and are using it in policymaking. The information either directly impacted policy decision-making or is being used to support one side in public policy debates. By observing the distribution of policy attention in citations, we can infer the policy topics on which members tend to consume party-aligned think tank information.

I collected party-aligned think tank citations using keyword searches of the Congressional record from 2004-2016. I searched for each organization's name and acronym and recorded the page in the Congressional record in which the search appeared. A trained research assistant then went to each page and retrieved the text of the citation, including any necessary contextual sentences. The assistant then identified and eliminated all instances where the citation was incidental,⁵⁸ where the keyword search returned a reference to a different organization, where members were referring to the organization negatively or where the member was using referencing the think tank as a foil.⁵⁹ Nearly all of the remaining observations are direct references to party-aligned think

⁵⁸ Such as a reference to the think tank on the chamber calendar

⁵⁹ Such as a Democrat stating, "Even the ultra-conservative Heritage Foundation supports my plan."

tank reports or events, such as “According to a report by [organization name]...” This process yielded 1,868 citations from 2004-2016, 763 by Democrats and 1,105 from Republicans.

Figure 7.4 shows the overall distribution of attention to policy in party-aligned citations. The distribution is much more concentrated in its top category, macroeconomics, than white papers. Health care and social welfare policy also receive considerable citations. These issues are often motivating issues for political parties as they are owned by the Democratic Party as their core redistributive policy goals and important to *laissez-faire* policy goals of the Republican Party (Fagan 2019). The same five issues with significant local dimensions, science and communication, public lands, transportation, agriculture and trade, receive few citations. Next, Figure 7.5 compares citations relative to Congress attention using the natural log of the ratio of the percent of citations to the percent of congressional hearings. We see a similar distribution to white papers, with a few exceptions. Immigration policy, one of the emergent highly contentious issues of the 2004-2016 period, is significantly overrepresented by party-aligned think tank citations. Foreign affairs, a historically consensus issue, is significantly under-represented. Because these citations are drawn from relatively high-profile statements on the floor of Congress, they may represent members using party-aligned think tank citations in public debates, and thus are more likely to use them on contentious issues than less contentious issues.

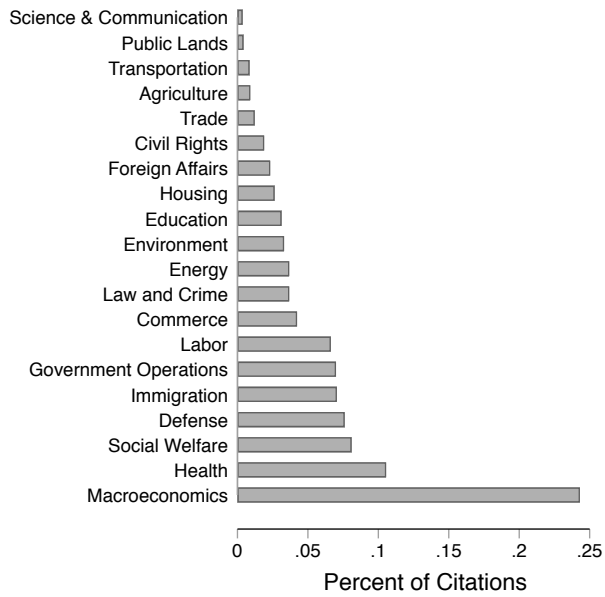


Figure 7.4: Distribution of Party-Aligned Think Tank Citation Policy Attention

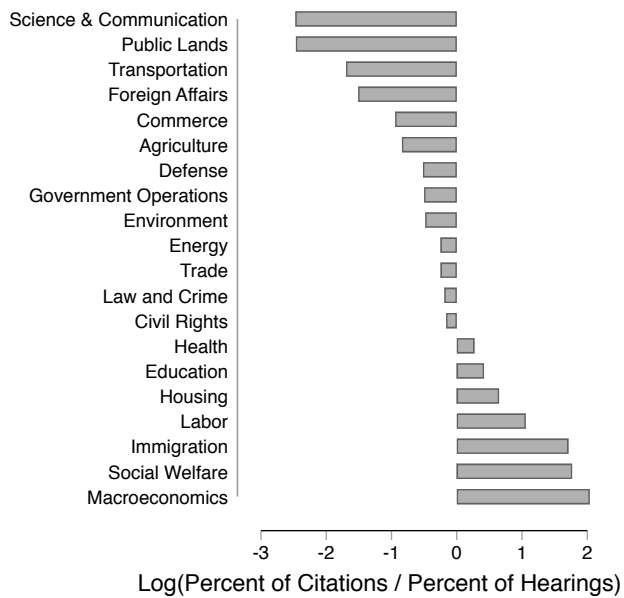


Figure 7.5: Distribution of Citation Policy Attention Relative to Hearings

Lobbying disclosure reports

While all four party-aligned think tanks are primarily 501(c)3 non-profit corporations who cannot directly lobby, the Heritage Foundation, Center for American Progress and Center on Budget and Policy Priorities maintain companion 501(c)4 lobbying organizations. These organizations employ both full-time lobbyists to directly advocate for the organization's policy goals and also pay a portion of the 501(c)3 employees' salaries in order to allow them to directly advocate for legislation without violating tax law. 501(c)4 organizations file quarterly Lobbying Disclosure Act (LDA) reports with the House and Senate to identify all bills that they advocated for. Unlike the other datasets, which capture public activity, these lobbying disclosure reports allow us to observe behind-the-scenes lobbying by think tank. The Center for Responsive Politics extracts the bill numbers for each bill named in an LDA report. I collected all 909 bill identifiers named in these reports. I then paired the extracted bills to the Congressional Bills Project dataset in order to identify their policy content.

Figure 7.6 shows the overall distribution of bills named in think tank lobbying disclosure reports. Unlike other outputs, government operations is the standout category. This difference is likely due to lobbying on provisions in annual omnibus appropriations bills, which are coded under government operations when considered as one package, rather than coded for the policy content of their individual components. Other than government operations, the policy content of lobbying disclosure reports strongly resembles the other outputs, with a heavy focus on domestic redistributive economic policy and a smaller focus on policy with a more localized dimension. However, the

picture changes slightly when compared to all Congress bills. In Figure 7.7, we see that agriculture policy is the fourth most over-represented topic in LDA reports. As with government operations, this may be due to the structure of bills and the PAP coding system; large farm bills often include both agriculture policy and means-tested food aid. When means-tested food aid is discussed on its own it would be coded as social welfare policy, which is in line with the party-aligned think tanks' focus on redistributed domestic economic policy, but the larger bill would be categorized as agriculture policy.

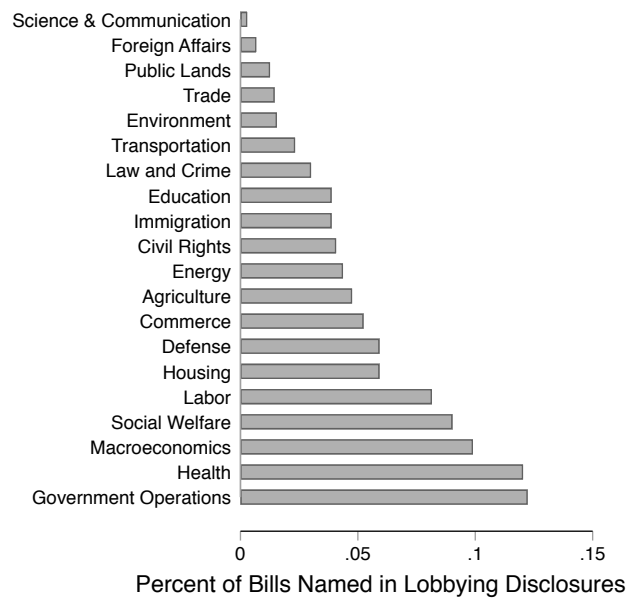


Figure 7.6: Distribution of Attention to Policy in Bills Named in Lobbying Disclosures

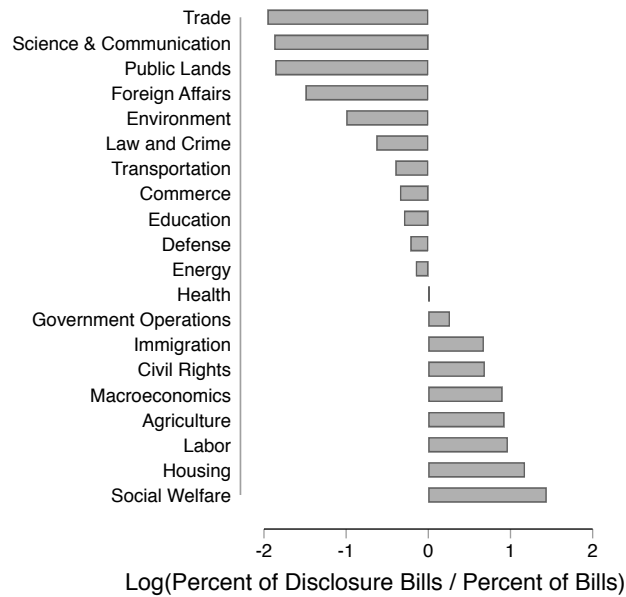


Figure 7.7: Attention to Policy in Bills Disclosed in Lobbying Disclosures Relative to All Bills

Hearing witnesses

Finally, I measured party-aligned think tank testimony before Congressional hearings using the same data that I introduced in Chapter 5. Members of Congress use hearings to define problems, identify potential solutions, and field public arguments (Bawn 1997; Lewallen, Theriault, and Jones 2016; Workman, Shafran, and Bark 2017). Party-aligned think tanks frequently testify before these hearings to help members achieve their goals. While a handful of hearings receive substantial media attention each year, many are lower-profile affairs where members of Congress genuinely seek information that may be useful in policymaking (Lewallen, Theriault, and Jones 2016). I identified each instance of testimony recorded in the ProQuest Congressional database

using keyword searches, aggregating by Congress. I then paired each identified hearing to one coded by the Policy Agendas Project for policy content. This process yielded 443 witnesses between 2004 and 2016.

Figure 7.8 shows the overall distribution of attention to policy in hearings where party-aligned think tanks testified. The distribution is more mixed than the other three outputs. Think tanks are called to testify frequently before foreign policy, defense, commerce and energy hearings, as well as the traditional domestic economic policy areas of health care and macroeconomics. On the low end, they are rarely called to testify before the issues with local dimensions, as well as education. Given that education scholars point to the important role of think tanks in structuring debates over education reform during this period (Haas 2007; McDonald 2014), their decreased presence in hearings is surprising. However, when we compare their testimony to all hearings in Figure 7.9, we find that macroeconomics, social welfare and housing are top issues.

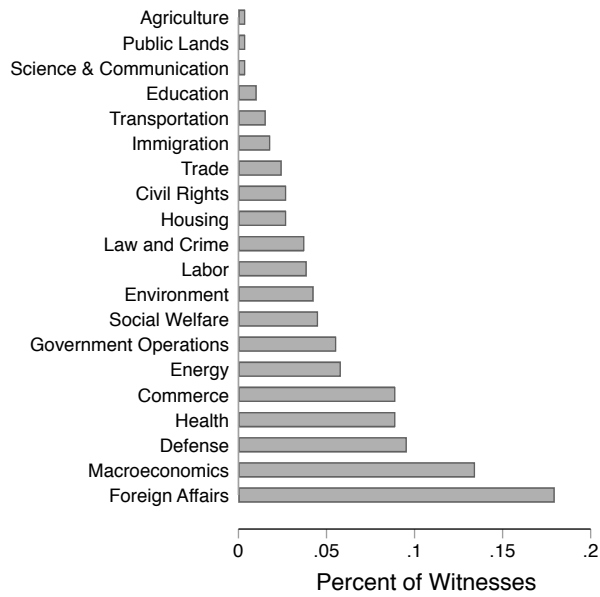


Figure 7.8: Distribution of Testimony Attention to Policy

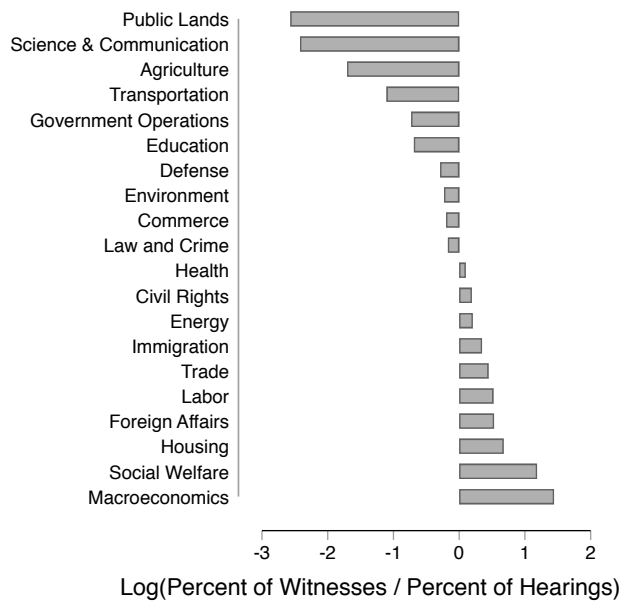


Figure 7.9: Distribution of Relative Testimony Policy Attention Relative to Hearings

PARTY-ALIGNED THINK TANK ISSUE ATTENTION AND POLARIZATION

Bivariate Cross-Sectional Models

Next, I examine the relationship between issue polarization and party-aligned think tank activities. Issues that are more polarized will receive more attention from party-aligned think tanks relative to Congress. I first test this hypothesis by comparing relative attention to policy from each of the four outputs to polarization on their own. Each operationalization of issue attention from party-aligned think tanks is measured independently from the others, while polarization is constant across issues. Thus, we can produce a fifth test by averaging together each of the four independent variables to produce an average.

First, we examine the relationship between relative attention to policy in party-aligned think tank white papers compared with Congressional demand for non-partisan information from the Congressional Research Service. Figure 7.10 shows the relationship between white paper policy attention and voice-vote adjusted party disagreement scores. There is a positive and significant relationship between the two variables ($p = 0.002$, $\beta = 0.06$). Issues that are more polarized receive more attention from party-aligned think tanks. While the model as a whole produces a strong fit ($r^2 = 0.44$), there are some notable outliers. Out of the twenty issues, five are much more polarized than the model predicts, and three are much less polarized. The over-polarized issue areas include labor, macroeconomics, civil rights and agriculture, while the under-polarized areas include public lands, foreign affairs and social welfare. The error on agriculture and social welfare are likely related to the difference between roll call votes on food stamps and

policy reports. When food stamps are discussed individually, they are coded as food aid, in the social welfare major topic. However, they are generally voted on by Congress as part of the farm bill, which also contains a number of less contentious agriculture provisions. Thus, many votes that should be highly contentious social welfare policy are coded as agriculture, but not policy reports on individual subjects.

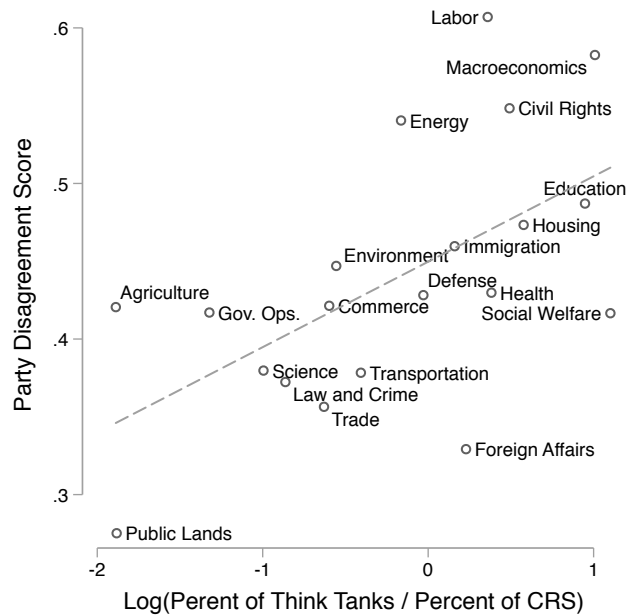


Figure 7.10: Relative White Paper Policy Attention and Polarization

Next, we turn to the relationship between policy attention in Congressional record citations and polarization across issues. Figure 7.11 shows the bivariate relationship. Members of Congress are more significantly likely to cite party-aligned think tanks on the floor of Congress on more polarized issues ($p = 0.001$, $\beta = 0.04$). While the overall amount of error is similar to white papers model ($r^2 = 0.45$), the error is more balanced among the policy areas. Immigration, social welfare, foreign affairs and public lands

policy are less polarized than predicted by the rate party-aligned think tank citations, while labor, macroeconomics, civil rights and energy are more polarized.

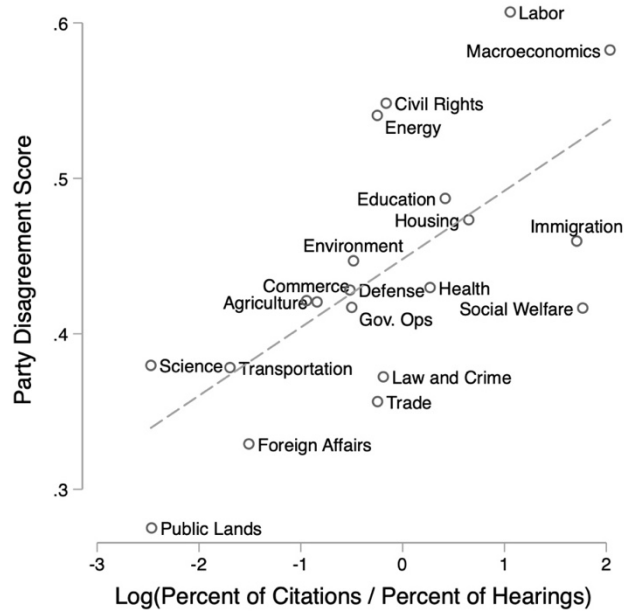


Figure 7.11: Congressional Record Citations and Polarization Across Issues

Next, we compare the policy content of bills named in party-aligned think tank lobbying disclosure reports and polarization (see Figure 7.12). When compared with the previous two models, we see a very similar positive and significant relationship between polarization and relative attention from party-aligned think tanks ($p = 0.001$, $b = 0.04$). Model fit is also similar ($r^2 = 0.44$). The similarity between these three models is remarkably as each independent variable is measured independently of the other three. While the three datasets are correlated ($\rho = 0.65$, see Table 7.2), they are not strongly multicollinear. Each output emphasizes different issues, but all three share a similar relationship with polarization.

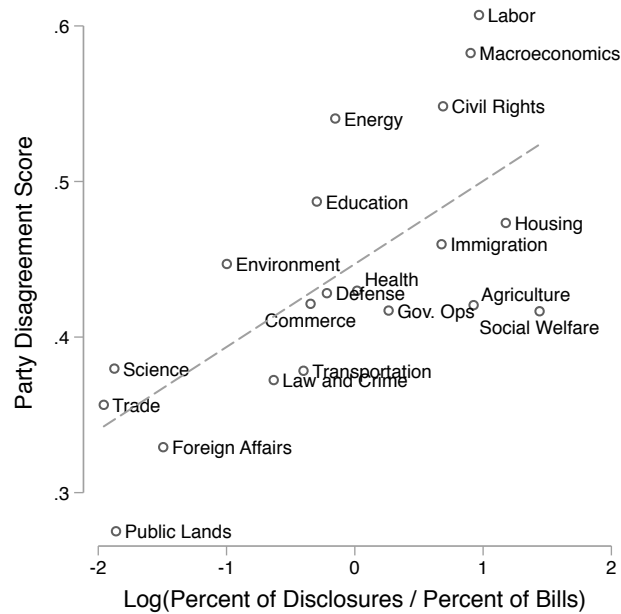


Figure 7.12: Lobbying Disclosure Reports and Polarization

Next, we turn to party-aligned think tank testimony before Congressional hearings. Figure 7.13. shows the relationship between relative party-aligned think tank testimony and polarization. While the relationship is still positive and significant ($p = 0.026$ $b = 0.04$), there is considerably more error than the other three models ($r^2 = 0.26$). Error in both directions increases as relative party-aligned think tank testimony increases. Given that there are just 774 witnesses during the observation period, the error could be due to sample size issues. There could also be strong selection effects, where party-aligned think tank witnesses are called before some types of hearings, but not others.

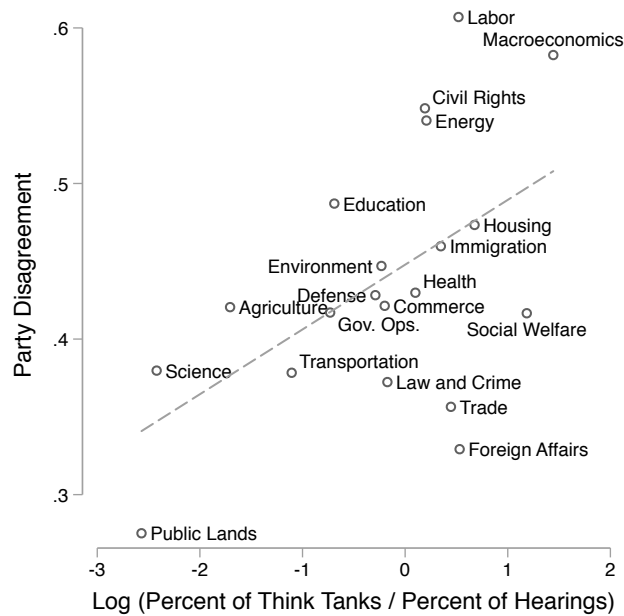


Figure 7.13: Witness Testimony and Polarization

Each of the four operationalizations of relative think tank attention derived from independent measurements of party-aligned think tank activities. If the distribution of attention to issues is also sufficiently independent, we can average the four independent variables together to produce one measurement of party-aligned think tank policy attention across outputs. Table 7.2 shows the correlations between each of the four outputs. The most closely related outputs are the relative attention to issues in Congressional Record Citations and hearing witnesses, which is expected given that they share a denominator ($\rho = 0.81$). The least closely related datasets are white papers and bills ($\rho = 0.48$). Figure 7.14 shows the relationship between this averaged variable and polarization. Model fit improves slightly over the other models ($r^2 = 0.50$), while the result remains positive and significant ($p = 0.001$, $B = 0.06$). We can conclude

confidently that issues that are more polarized receive more attention from party-aligned think tanks relative to Congress.

	White Papers / CRS	Citations / Hearings	Lobbying / Bills	Witnesses / Hearings
White Papers / CRS	1			
Citations / Hearings	0.72	1		
Lobbying / Bills	0.48	0.75	1	
Witnesses / Hearings	0.78	0.81	0.51	1

Notes: All tests are of the natural log of the ratios reported.

Table 7.2: Correlations Between Relative Think Tank Attention Across Outputs

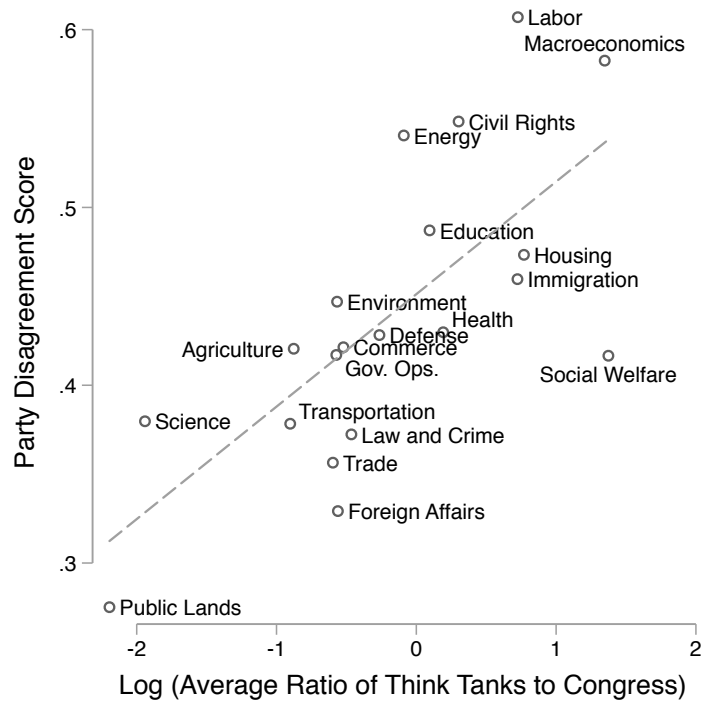


Figure 7.14: Average of Four Outputs and Polarization

Multivariate Testing for Omitted Variables

While the result is robust across bivariate models, we must also rule out potential confounding omitted variables that are endogenous to both polarization and party-aligned think tank attention. Party-aligned think tanks tend to prioritize issues that are owned by their party (Fagan 2019). Issue ownership describes the relationship between the core priorities of a political party and the electorate's trust in the party to handle the issue (Egan 2013). As parties in government prioritize an issue over the long term, the electorate trusts the party to handle that issue in office. If the parties prioritize some issues over others, those issues might polarize. If so, issue ownership presents a potential confounding variable in these models.

Fagan (2019) uses two different specifications of issue ownership across Policy Agendas Project major topics. Table 7.3 displays these specifications. The first, long-run issue ownership, is a continuous variable derived from survey data gathered by Egan (2013). A negative score indicates Democratic ownership, while a positive score indicates Republican ownership. The second, a binary measure, assigns each major topic to either Republican, Democrat or neither. Each has its flaws, as the issue ownership data do not cleanly map onto the Policy Agendas Project major topic areas. The continuous measure has no data on domestic commerce or housing policy and fails to capture both parties' prioritization of different types of macroeconomic policy. The binary measure accurately measures these three issues but fails to capture the degree to which the parties own issues. Because of these limitations, I run models using both measures. Table 7.4 shows the results of a multivariate OLS regression of polarization of issues. We see no

evidence that issue ownership is confounding variable. In Model 1, which contains the continuous issue ownership operationalization, there is no relationship between polarization and issue ownership ($p = 0.788$). In Model 2, which contains the binary ownership variables, there is a negative relationship between issue ownership and polarization. Core party priorities do not drive polarization across issues, and thus are not an endogenous omitted variable.

Major Topic Area	Egan (2013) ¹²	Binary Ownership ³
Agriculture	0	Neither
Civil Rights	n/a	n/a
Defense	14	Republican
Domestic Commerce	n/a	Republican
Education	-10	Democratic
Energy	-3	Neither
Environment	-18	Democratic
Foreign Affairs	6	Republican
Government Operations	0	Neither
Health Care	-12	Democratic
Housing	n/a	Democratic
Immigration	9	Republican
Labor	-12	Democratic
Law and Crime	7	Republican
Macroeconomics	1	Both
Public Lands	0	Neither
Science and Communication	0	Neither
Social Welfare	-14	Democratic
Trade	5	Republican
Transportation	0	Neither

¹ Values are the coefficient on Egan's (2013) estimate of long-run issue ownership coefficients in public opinion surveys. Negative scores are more Democratic, positive scores are more Republican. Defense is assigned the average of Egan's "Domestic Security" and "Military" category. Macroeconomics is assigned the average of "Inflation," "Taxes," "Economy," "Jobs," and "Inequality" categories. Agriculture, government operations, public lands, science and communication and transportation policy were coded=0. No data exist for these areas, all of which tend to have very low levels of party polarization and issue salience (Jochim and Jones 2013).

² Civil rights excluded due to conflicting issues contained in the Comparative Agendas Project coding (abortion and civil rights issues), and its failure to meet Egan's consensus issue criteria. Domestic commerce, and housing excluded due to a lack of survey data.

³ Binary values are coded=1 to the issue area where Egan's data are greater than 5 or less than -5. For housing and commerce, there is no data. I assigned housing to Democrats as a dimension of social welfare policy and Domestic Commerce to Republicans as a dimension of their advantage on "big government" business or regulatory policy (Petrocik, Benoit and Hansen 2004).

Table 7.3: Issue Ownership Values by Comparative Agendas Project Major Policy Topic Area (Fagan 2019)

Next, I test if issue salience is a potential endogenous omitted variable. Party-aligned think tanks may produce more information on highly salient issues, either in anticipation of those issues hitting the agenda or because partisan conflict on issues

increases issue salience. If these issues are also more polarized, salience would confound estimates of the relationship between party-aligned think tanks and polarization. Table 7.4 also displays OLS estimates of polarization across issues. There is no evidence that issue salience drives polarization across issues, either on its own (Model 3, $p = 0.776$) or when interacted with party-aligned think tank attention (Model 4, $p = 0.512$). We can rule out issue salience as a potential source of endogeneity.

Independent Variables	Model 1	Model 2	Model 3	Model 4
Logged Average Think Tank Attention	0.07** (0.02)	0.06** (0.02)	0.06** (0.02)	0.06** (0.02)
<i>Issue Ownership</i>				
Republican Owned	-0.05 (0.03)			
Democratic Owned	-0.03 (0.04)			
Long-Run Issue Ownership (Squared)		-0.0001 (0.001)		
<i>Issue Salience</i>				
Most Important Problem (MIP)			0.06 (0.20)	-0.14 (0.36)
MIP * Think Tank Attention				0.18 (0.26)
r^2	0.60	0.50	0.50	0.51
n	19	17	20	20

Notes: Standard errors in parenthesis. * $p < .05$ ** $p < .01$ *** $p < .001$. Civil rights policy excluded from both models. Commerce and Housing excluded from Model 2 due to missing issue ownership data.

Table 7.4: OLS Estimation of Polarization Across Issues, Testing for Issue Ownership and Salience as Confounding Variables

PANEL MODELS

Finally, we can examine the short-term relationship between polarization and party-aligned think tank attention using time series cross sectional methods, where each major topic area represents one panel with multiple observations across congresses.

Agenda setting scholars frequently use error correction or autoregressive distributed lag models to test if an input can “set the agenda” for an output (Bevan and Jennings 2014; Bevan and Rasmussen 2017; Fagan 2018; Froio, Bevan, and Jennings 2017; Green-Pedersen and Mortensen 2010; Lovett, Bevan, and Baumgartner 2015; Peter Bjerre Mortensen et al. 2011), such as if an executive speech or party platform can set push legislative agenda toward some issues and away from others. Other political scientists use error correction or autoregressive distributed lag models to examine the short-term impact of an independent variable on a dependent variable, such as the impact of changes in public preferences for spending on appropriations (Jennings 2009; Soroka and Wlezien 2010, 2019; Wlezien 1995). In this section, I use similar methods to measure the impact of party-aligned think tanks on polarization.

In Chapter 3, I introduced three strategies that party-aligned think tanks could use to influence party positions. These were elite persuasion, activating latent preferences and framing. These strategies suggest different relationships between short-and-long term party-aligned think tank attention and polarization. An activating latent preferences strategy, where party-aligned think tanks produce “ammunition” for their co-partisans to use in public debates, suggests a strong short-term relationship. As issues move into the later stages of the policy agenda and are debated in the media, party-aligned think tanks will produce greater information on those issues. When the debate moves on, they will move on to other issues with it. On the other hand, an elite persuasion strategy, where party-aligned think tanks convince legislators to trust different conclusions from policy analysis, suggests a longer-term relationship. Party-aligned think tanks convince

legislators over the long-term of a different relationship between an issue's policy outputs and policy outcomes. A reframing strategy suggests both short and long-term relationships, as they both work to define issues on the current agenda as more conservative or liberal and to change stickier longer-term issue definitions.

Panel methods have a number of strengths and weaknesses for these purposes. Most importantly, they allow models to control for unobserved heterogeneity across panels. They also allow us to separate short-term effects from long-term effects. However, panel models have a number of important weaknesses when estimating the relationship between polarization and party-aligned think tank activities. While party disagreement scores require fewer observations than DW-NOMINATE scores to reliably estimate, estimates for many policy topics with fewer votes are much less reliable. While low reliability won't bias estimated beta coefficients, it will increase standard errors. On the independent variable side of the equation, it limits the available data to party-aligned think tank white papers, as the other three datasets lack enough observations biannually to reliably estimate attention to policy across 20 major topics. Finally, we are limited to just seven congresses, or six observations per panel with lags. Having so few time periods limits some of the inferences we can make, such as Granger non-causality tests (Dumitrescu and Hurlin 2012).

I use error correction models to estimate the relationship between polarization and relative attention to policy in party-aligned think white papers.⁶⁰ Because polarization in

⁶⁰ I use an error correction model instead of an autoregressive distributed lag model. While they produce identical estimates, error correction models offer a simpler interpretation of the short-term impact of an independent variable on a dependent variable.

Congress trends upward during the time period but party-aligned think tank attention always sums to 1 across the 20 issues, I include a trend variable in the equation. I also control for the unobserved heterogeneity in panels⁶¹ using both fixed effects and panel-corrected standard errors (Beck and Katz 1995). Because both the dependent variable and independent variables are AR(1), I also include an AR(1) disturbance term. Equation 7.1 shows the basic model (Model 2 in Table 7.5):⁶²

Equation 7.1: Error Correction Model of Polarization Across Issues and Time

$$\begin{aligned} \Delta Polarization_{it} & \\ &= Polarization_{it-1} + \Delta Think Tanks_{it} + Think Tanks_{it-1} + Trend_t \\ &+ e \end{aligned}$$

The results of these models are presented in Table 7.5. In seven of eight model specifications, party-aligned think tank attention significantly increases polarization of issues over the long-term but has little impact on polarization in the short-term ($p < 0.05$). The one exception is Model 4, which contains both the trend variable and fixed effects. Given that these models contain only six observations for twenty panels, a fixed effects model will struggle to distinguish between long-term relationships and fixed effects and inflate standard errors (Beck and Katz 1995). The long-term effect is significant in Models 6 and 8, which include the trend variable but substitute fixed effects for panel-

⁶¹ A Hausman test suggests fixed effects are appropriate over random effects ($p < .001$).

⁶² Because panel models are vulnerable to model specification and I have no a priori expectation of which model best defines the time series cross-sectional relationship between the two variables, I report each different model specification in Table 7.5.

corrected standard errors. In seven of eight models, there is no significant short-term relationship between polarization and party-aligned think tank attention. Model 8, which both includes the trend and includes a disturbance term to correct for the AR(1) structure of the dependent variable panels, returns a significant short-term coefficient in a one-tailed test ($p < 0.1$). If there is a short-term impact of think tank attention to issues on polarization, it is much weaker than their long-term impact. Overall, these results suggest that party-aligned think tanks engage in long-term elite persuasion rather than activating latent preferences.

Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Party Disagreement (t-1)	-0.64*** (0.09)	-0.74*** (0.10)	-0.93*** (0.11)	-1.17*** (0.11)	-0.64*** (0.18)	0.26 (0.18)	-0.65*** (0.18)	-0.82*** (0.18)
Δ Relative Think Tank Attention (t)	0.01 (0.02)	0.02 (0.02)	0.03 (0.02)	0.02 (0.03)	0.01 (0.01)	0.02 (0.01)	0.01 (0.01)	0.02+ (0.01)
Relative Think Tank Attention (t-1)	0.03** (0.01)	0.03*** (0.01)	0.06* (0.02)	0.03 (0.02)	0.03** (0.01)	0.03** (0.01)	0.03** (0.01)	0.04*** (0.01)
Major Topic Fixed Effects	No	No	Yes	Yes	No	No	No	No
Trend ¹	No	Yes	No	Yes	No	Yes	No	Yes
Panel Corrected Standard Errors	No	No	No	No	Yes	Yes	Yes	Yes
Panel-Specific First-Order Autocorrelation	No	No	No	No	No	No	Yes	Yes
r^2	0.28	0.33	0.27	0.31	0.28	0.38	0.29	0.38
n	120	120	120	120	120	120	120	120

Notes: Standard Errors in Parenthesis. + $p < .1$ * $p < .05$ ** $p < .01$ *** $p < .001$

1 Trend is positive and significant ($p < .001$) in all models

Table 7.5: Time Series Cross Sectional Estimates of Δ Party Disagreement (t)

SUMMARY

When legislators search for policy analysis on a given issue, the information they find can vary considerably by issue. On some issues, their searches will return a variety of non-partisan information from sources like the federal bureaucracy, Congressional

research service, and other credible experts. On some issues, the non-partisan sources will face intense competition from partisan information producers such as party-aligned think tanks. These differences in the balance of the information environment has substantive implications for legislative behavior on issues. When the information environment is largely non-partisan, issues tend to have lower levels of polarization. When partisans compete for the information environment, polarization increases dramatically.

These differences hugely impact our understanding of the policy process. On the issues where non-partisan information is still dominant, our understanding of agenda setting centered around problem-solving persists. These issues tend to be more localized, such as transportation, agriculture, public lands and science and communication. On these issues, the government's agenda will be set by emerging problems and an impetus to offer effective solutions to those problems. The parties will find it easier to come to a consensus around problem-solving. If they disagree over who will bear the trade-offs of those policies, the parties can bargain over the policy response. On the other hand, areas of traditional ideological conflict over domestic redistributive economic policy attract the most attention from party-aligned think tanks, such as social welfare, labor, macroeconomics and housing policy. When one of these issues comes up before the Congressional agenda, the partisan disagreement is unlikely to be limited to a simple ideological disagreement over the proper role of government. Rather, legislators of opposite parties are likely to believe that enacting certain policy outputs will lead to vastly different outcomes. They will struggle to come to a bipartisan consensus on these

issues, because even as they may agree that the problem requires a policy solution, they disagree about whether the solution will solve the problem or its secondary consequences. These disagreements will break down the problem-solving process driving agenda setting. Problems will continue to become more severe until one party is able to act narrowly on its own to enact some sort of policy solution or things become bad enough to force a consensus.

Chapter 8: Democracy During the Information Wars

The error correction model of agenda setting (Jones and Baumgartner 2005) creates a framework through which governments solve society's problems. Because cognitive and physical resources are limited, governments must ignore most problems most of the time. As problems bubble up through society and become more severe, policymakers are forced to attend to those problems. Because the problem has become severe enough to demand their attention, both government and opposition parties feel pressure to address it. They search for viable policy alternatives to address the problem, enact a change reduce its severity, and move on to the next issue. Where possible, they set up subsystems to maintain the new status quo until their attention is required again. Over time, the cycle of ignoring and then attending to problems assures that policymakers represent their constituents by dealing with the most important problems facing the country at any given time. Governments are slower to solve problems in authoritarian systems or democracies with less efficient representational systems, leading to larger policy punctuations when they finally do act (Baumgartner et al. 2017; Fagan, Jones, and Wlezien 2017).

The error correction framework requires that policymakers understand the relationship between the policy outputs they enact to address the problem and their intended impact on a policy outcome. Because elected officials and high-level executives are at best generalist policymakers, choosing a policy output requires policy advice (Baumgartner and Jones 2015). The framework assumes that policymakers will choose a

solution that has some effectiveness at solving the problem, even if they don't always choose the most effective at any given time. If their policy advice is wrong or they are unable to reach a sufficient consensus to enact a major policy change, errors continue to accumulate. For some problems, error accumulation ends in a sudden and violent catastrophe. Because policymakers are more likely to trust experts in times of crisis (Shafran 2015), they may eventually receive good policy advice and enact an effective solution.

However, most problems slowly bubble up and fester, rather than fail suddenly and spectacularly. In the United States, these include problems such as the high health care costs but poor outcomes, racially discriminatory policing, gun violence, a deficit skyrocketing during good economic times, rising inequality or rapidly increasing deaths from opioids in rural areas. There are solutions to these problems; many cities, states and countries have very different policy outcomes than the United States as a whole. However, there is intense disagreement between experts and one or both political parties on what solutions are effective to address each. Because U.S. institutions necessitate bipartisan policymaking to enact large-scale policy changes, the only way these problems will be addressed by public policy is that both parties form a consensus on policy solutions. In the past, consensus tended to form around the recommendations of experts. This resolution is impossible when both parties adopt knowledge regimes that are at odds with each other. Thus, errors will continue to accumulate, but they require larger and larger policy punctuations in order to return a system to where it should be.

This dissertation argued that party-aligned think tanks are particularly important components of U.S. knowledge regimes. Because U.S. political parties do not directly control their own policy advisory organizations, they rely on privately funded think tanks to serve in a role reserved for formal party organizations in most democracies. However, these organizations have very different incentives than formal party organizations. Instead of seeking to maximize the party's seat share in the next election, they seek to achieve policy goals. These policy goals often conflict with the conclusions of non-partisan experts, and thus party-aligned think tanks often produce recommendations that conflict with them. Because they hold a privileged position in their political parties and design their organizations to maximize advocacy, their co-partisans tend to listen to party-aligned think tanks over neutral experts. Over time, they develop a heuristic that information from the neutral experts is biased, and information from organizations that are on their side is unbiased.

Because party-aligned thinks have policy goals far to the left or right of center, parties that rely on their policy advice will shift their positions to toward the extremes. When positions move in opposite direction, the party system polarizes. This dissertation tested this theory by examining the relationship between polarization in the U.S. Congress and party-aligned think tank activities. It found a strong, significant and robust relationship between the two variables. After the technocratic knowledge regime began to collapse in the 1970s, party-aligned think tanks grew larger and testified more frequently in Congress. Their growth is closely related to polarization in Congress but occurred just before polarization increases. There is also no evidence that the relationship is caused by

cuts to Congressional capacity and thus demand for external information production. Rather, the balance of the information in environment in Congress shifted away from non-partisans and toward partisan knowledge regimes. When their activity is disaggregated into individual issues, we see a very close and consistent connection between party-aligned think tank activity and polarization. Issues where party-aligned think tanks produce more white papers, testify more frequently before hearings, are cited in the Congressional record, and lobby on bills tend to be more polarized. When measured dynamically across time and issues, the issues that receive more party-aligned think tank attention are more polarized over the long term, but not in the short term. Taken as a whole, these results suggest a strong and non-spurious relationship between the two variables. The connection may be directly causal, where party-aligned think tanks are a powerful treatment effect on their own. However, because polarization is a complex phenomenon, party-aligned think tanks may be one bigger piece of a story of party elites changing their preferences.

Think tanks, party-aligned and otherwise, deserve more attention from political science. Our discipline tends to conceive of politics as a struggle for political power among strategic and rational actors who seek power for its own sake. Interest groups are able to achieve their policy goals when they contribute to this struggle in a way that furthers those goals. Think tanks should be smaller players in political parties under this model than sociologists, historians and political participants regard them to be. Most think tanks are many steps removed from the electoral fortunes of elected officials and political parties. They act by influencing the ideas, capacity and objective understanding

of reality of policymakers. These activities are often more difficult to measure and model than more directed and overt activities like campaign contributions, direct political actions or endorsements, but they likely have a powerful impact on outcomes.

ASYMMETRIC INFORMATION WARS

While both parties created their own knowledge regimes, there are also clear asymmetries. The Republican knowledge regime is older, more influential and more distant from technocratic knowledge regime than the alternative regime set up by the Democratic Party. On most issues, Democrats maintain a close connection to the scientists, universities and government agencies that make up the technocratic knowledge regime (Grossmann and Hopkins 2016). Republicans, on the other hand, continue to move away from it. Conservatives since the 1970s understand that an error accumulation model leads to a broader role for government in daily life. Voters demand that their elected officials work to solve their problems (Egan 2014). Some of these problems may be best solved by decreasing government activity, such as the deregulation of the trucking, airline, natural gas and communications industries during the 1970s. Despite the entrenched interests fighting policy change, they were supported by both political parties, ideological conservatives and non-partisan experts (Jones, Theriault, and Whyman 2019). However, more often than not, experts support policies involving government intervention to solve problems. Conservatives, be they libertarians who believe in a laissez faire political theory, religious conservatives who believe in traditional family, cultural or moral values or some of the other groups contained within the contemporary Republican

coalition, often believe that these interventions are wrong, but understand that their elected officials will always be pressured by voters to do something when problems become salient. Thus, they need to interrupt the link between the experts that recommend government interventions and elected officials. Ideological conservatism formed long before the U.S. party system began to materialize. It was not able to begin to shape the behavior of the Republican Party until after conservatives established their own knowledge regime. Breaking this link may not have been a sufficient condition; conservatives may have needed The Great Broadening to react to (Jones, Theriault, and Whyman 2019). However, this dissertation argues that it was an important piece of the causal story of how the Republican Party shifted from the party of Eisenhower, Nixon and Ford, who retained and valued the advice of non-partisan experts (Williams 1998) to where it is today.

Democrats, on the other, seek to use public policy as an instrument to accomplish other goals, such as reducing inequality, eliminating racial and gender inequities, or protecting the environment. Because public policy is an instrument, rather than an end in itself as with conservatism, progressives need it to be effective. Thus, progressives must value expertise in order to accomplish their goals. They may seek to minimize the secondary consequences of policy, such as its cost or impact on non-target populations, but their tether to expertise is necessarily much stronger than it is for ideological conservatives.

The asymmetry has never been clearer than during the Trump Administration. Immediately after taking power, the Trump Administration eliminated public references

to climate change from federal government websites (Davenport 2017). In an attempt to force out career scientists in federal agencies, it aggressively reassigned civil servants to new locations and responsibilities (Clement 2017). It blocked career federal scientists from traveling to conferences (L. Friedman 2017) and testifying before Congress (Friedman 2019). It prevented the release of dozens of peer reviewed studies from the Agricultural Research Service funded by taxpayers (Evich 2019). It retaliated against economists in the Department of Agriculture’s Economic Research Service for publishing research finding that farmers were harmed by the Administration’s trade policies and changes to tax law (Mccrimmon 2019). It created a process of “red team, blue team” exercises to question peer-reviewed research funded by the federal government (Plumer and Davenport 2019). It imposed onerous requirements on scientific research that could be used to inform EPA regulations, such as requiring that public health studies use non-anonymized data (Friedman 2019). It proposed eliminating the Congressional Budget Office’s role in estimating the cost of legislation and replacing it with outside estimates, including those from the Heritage Foundation (Klein 2017). The President himself contradicted National Oceanic and Atmospheric Administration’s (NOAA) forecast for the path of Hurricane Dorian, saying that it would veer West toward Alabama rather than continuing East (Baker, Friedman, and Flavelle 2019). After NOAA scientists clarified that their forecast did not project the hurricane to move toward Alabama, the Administration threatened to fire the scientists (Baker, Flavelle, and Friedman 2019).

Many conservative reformers recognize that their party’s relationship with science and expertise is unsustainable and are attempting to do something about it. These include

a number of think tanks created by conservative Republicans who seek to reconnect the party to science and expertise. The Niskanen Center was founded in 2015 by a number of former Cato Institute staffers with the goal of promoting libertarian policy solutions when those solutions are supported by experts, such as an open immigration policy or market-based carbon pricing systems.⁶³ Niskanen’s founder, Jerry Taylor, describes himself as a reformed climate skeptic and Ayn Rand devotee who slowly became aware that the rampant climate skepticism in the conservative movement and many other libertarian orthodoxies about public policy were wrong (Skibell 2017). Similarly, a group of former Heartland Institute staffers working on insurance policy resigned from the organization and founded the conservative R Street Institute (Graves 2012). The staffers objected to a billboard that featured a mugshot of Ted Kaczynski and the message, “I still believe in Global Warming. Do you?” R Street employs a number of former Republican Party staffers. Their research includes both expert-supported solutions in support of conservative priorities such as reforming the Post Office and National Flood Insurance Program, but also support for climate change legislation and increased Congressional capacity to process information. Just as the Republican Party changed endogenously in the 1970s, it may be able to change again if these reformers are successful.

⁶³ Niskanen describes its mission, theory of change and relationship with expertise in detail in their Conspectus, available online at <https://www.niskanencenter.org/wp-content/uploads/2019/09/Niskanen-conspectus-2017-final-1.pdf>.

Appendix

Years	Source
1973-1976	1976 IRS Form 990 (retrieved from document cloud)
1977	1977 IRS Form 990 (retrieved from document cloud)
1978-1980	1983 Heritage Foundation Annual Report
1981-1991	1991 Heritage Foundation annual report
1992	Interpolated
1993-1994	1994 Heritage Foundation Annual Report
1995	Solomon 1996
1996	1996 Heritage Foundation Annual Report
1997-2016	Various IRS Form 990s (retrieved from ProPublica Non-Profit Explorer)

Table A.1: Heritage Foundation Revenue Data Sources

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