



Following the money: trade associations, political activity and climate change

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Abstract

The political activities of industries associated with the production and consumption of fossil fuels have thwarted state efforts to advance climate policy. Yet research on the role of trade associations that firms use to coordinate their activities remains sparse. Studies of business political activity are generally focussed on the firm level with trade associations typically considered only as part of wider advocacy coalitions. Scholars are still to examine the full range of political activities of trade associations. Using an original dataset built from trade associations' IRS filings, we find that trade associations engaged on climate change spent \$3.4 billion in 10 years on political activities, with the largest expenditure on advertising and promotion, followed by lobbying, grants and political contributions. Our data challenges the prevailing assumptions about the primary political activities of business actors. To explain the variation in spending, we present the findings from a regression analysis and semi-structured interviews. We argue that scholars have for too long failed to account for the political activities of trade associations, which are also one of the most important opponents of climate policies.

Keywords Business political activity · Trade associations · Climate change · Lobbying

1 Introduction

The political activities of industries associated with the production and consumption of fossil fuels are one of the principal reasons that states are failing to limit greenhouse gas emissions. There is growing evidence, especially in the USA, that the political activities of firms across the economy have played a key role in thwarting government attempts to implement climate policies (Brulle 2018: 42; Cory et al. 2021; Downie 2019). Yet research is still to systematically analyse the role of trade associations that firms use to coordinate

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their activities. This is despite recent qualitative studies indicating that the role of trade associations has been critical in climate politics (Downie 2018; Williams et al. 2022).

To be sure, across the US trade associations, including the American Petroleum Institute (API), which represents the oil and gas industries, America's Power, which represents coal, and the Edison Electric Institute (EEI), which represents private utilities, spend tens of millions of dollars per year carrying out a range of activities to influence the political process. For example, in 2017, the API launched a multimillion-dollar public relations campaign, known as "Power Past Impossible", which aired advertisements around the country, including during the Super Bowl to highlight how the oil and gas industry benefits the lives of Americans, with catch phrases, such as "oil taps potential, oil pumps life" (Sheehan 2018).

At the same time, research on the role of trade associations remains sparse. Studies of business political activity are almost always focussed on the firm level with trade associations generally considered only as part of wider advocacy coalitions. For example, in political science and public policy, there is a rich tradition on various forms of advocacy coalitions with diverse sets of actors, including government officials, interest groups and scientists (Sabatier 1988; Weible et al. 2009), but rarely is the focus solely on trade associations (Drope and Hansen 2009). Likewise, there are few studies in business and management or sociology that explore trade associations directly (Aldrich 2018: 24; Lawton et al. 2018; Walker and Rea 2014). This is surprising given that studies that have zeroed in on trade associations have highlighted their prevalence in the USA and their political activities (Barnett 2012; Spillman 2012; Aldrich 2018).

In this article, we address this gap in the literature by examining the political activity spending of trade associations in the USA engaged on climate change issues. As we will show, trade associations spent \$3.4 billion on political activities related to climate change between 2008 and 2018. Our findings are based on an original dataset built from an assessment of revenues and spending from 89 trade associations across 9 sectors of the US economy. We use Internal Revenue Service (IRS) 990 filings to estimate trade association revenue and spending. This approach allows us to disaggregate political spending across four different political activities: lobbying, political contributions, advertising and promotion, and grants.

We find that trade associations spent \$2.16 billion on advertising and promotion, \$729 million on lobbying, \$394 million on grants and \$105 million on political contributions. In following the money, our data challenges the prevailing assumptions in the literature that lobbying and political contributions are the primary political activities of business actors. Indeed, we argue that existing research has largely overlooked two political activities of trade associations—advertising and promotion and grant giving—which in terms of dollars spent, are larger than lobbying and political contributions by a factor of 3 to 1.

To examine the factors that drive spending on these political activities, we present the findings of a regression analysis that show that levels of political spending are highly correlated with a trade associations' total revenues. However, we also find that some sectors, including oil and gas, have higher levels of political spending once we control for total revenues.

To complement the quantitative analysis, we undertake an initial exploration of four explanations for the variations in spending across these political activities. To do so, we rely on semi-structured interviews with respondents from the largest trade associations in the nine sectors identified. We find that one of the key reasons that trade associations spend more on advertising and promotion than any other activity appears to result from their specific role in maintaining the public reputation of their industry. The interview data also suggest that trade associations spend more on advertising and promotion and lobbying

because these activities are generally viewed as more effective than grants and political contributions.

Overall, these results contribute to our understanding of the organizations firms use to coordinate their activities and to the breadth of political activities employed by business. Our data suggest that an emphasis on lobbying and political contributions in the literature may well mean that a significant portion of business political activity, at least measured by spending, has been overlooked. For scholars of climate politics, this paper should also highlight the urgent need to pay more attention to the role trade associations can play as critical opponents to climate change action.

After a brief review of the literature on trade associations and climate politics, we present our data on trade association revenue and spending, specifically on lobbying, political contributions, advertising and promotion and grants. At each stage, we review the associated literature before presenting the data. We then turn to consider the factors that drive spending and explore the possible explanations for the variations across different political activities.

2 Trade associations and climate politics

Trade associations are ubiquitous in the USA, yet research on them is not. While there is a rich literature on the role that coalitions of state and non-state actors play in politics, including on “advocacy coalitions”, “lobbying coalitions” and related “advocacy networks” (Sabatier 1988; Mahoney and Baumgartner 2015; Keck and Sikkink 1998), research on trade associations themselves is limited. This is despite their prevalence in the USA with surveys in the 2000s indicating that there are well over 4500 national trade associations (Spillman 2012), and that many of these, including peak associations, such as the US Chamber of Commerce, represent powerful political actors with the potential to shape policy outcomes (Aldrich 2018; Barnett 2012).

Scholars across political science, sociology and business and management frequently call for more “systematic research” on trade associations, their functions and activities (Aldrich 2018: 24; Drope and Hansen 2009; Lawton et al. 2018; Walker and Rea 2014). Yet to the extent that research has been conducted on trade associations the focus is typically on why individual firms establish trade associations and participate in collective action (Drope and Hansen 2009; Kowal 2018). Comparative analyses of the different political activities undertaken by trade associations are missing.

The absence of research on trade associations is especially stark in the domain of climate change. Scholars have only recently begun to interrogate the behaviour of business actors in individual industries, such as oil, gas and coal, even though initial studies indicate that these actors have played a critical role opposing regulations and legislation designed to limit greenhouse gas emissions (Brulle 2018; Downie 2019). To our knowledge, no study has focussed solely on the role of trade associations in the domain of climate change. A significant omission given the size of their budgets, staff, lobbying activities and their potential to mobilize coalitions of business actors in support or opposition to climate policies.

Hence, our focus is squarely on trade associations and their political activities. Broadly that is “organizations created to represent business interests within specific domains, mobilizing firms within their domain so that collective action can be taken on common problems” (Aldrich and Staber 1998: 111). In the US context, we adopt the narrower definition of the Internal Revenue Code that defines trade associations as 501(c)(6) organizations that

are not-for-profit and have a common interest in promoting business interests of particular industries or the common economic interests of a given trade or community.

In what follows, we seek to answer four questions: How much do trade associations spend on political activities? How much do trade associations generally opposed to climate action spend on political activities compared to those generally associated with the climate movement? What are the drivers of their political spending? And, what explains the choice of political activity spending? To some extent, these questions are similar to those asked by scholars that have focussed on firms, but we ask them of trade associations and ask them in relation to a wider range of political activities given the traditional focus on lobbying and political contributions (Hojnacki and Kimball 1998; Hall and Wayman 1990).

To answer these questions, we first identified a sample of trade associations involved in climate change political activities. This sample was compiled from three sources: (i) reports on trade associations and climate change produced by the Union of Concerned Scientists and Influence Map; (ii) a listing of all trade associations that lobbied on climate change (Brulle 2018) or (iii) appeared in a US Senate or House hearing regarding climate change. This review produced a list of 87 trade associations in 9 sectors. A complete listing of the sample of organizations is provided in the supplemental material (see Table S-1). Financial data for these organizations was then obtained through a review of the IRS 990 filings of these organizations in the following categories: overall financial activities; lobbying expenditures; political contributions; advertising and promotion and grant programs. While our data allow us to distinguish between different political activities, they do not enable us to distinguish between different policy issues. Hence, our estimates represent total political expenditures by trade associations that have engaged on the issue of climate change as well as other political issues, not expenditures exclusively targeted at climate change policies.

3 The political activities of trade associations

Before we examine the political activities of trade associations, we first present demographic data on the population of trade associations in the USA involved in climate change issues and their overall financial resources. Figure 1 displays the population of trade associations in our sample based on their financial resources. Each sector has one large trade association and typically several smaller associations that align with subsections of these industries. For example, the oil and gas sector has the American Petroleum Institute (API), by far the largest based on its financial resources. There are also many more associations that represent specific industries within the sector, such as the American Fuel & Petrochemical Manufacturers, which represent oil refiners, and the Independent Petroleum Association of America (IPAA), which represent independent oil and gas producers.

To assess the financial resources, we collected data on the total revenues of each trade association (see Table S-2 for data). Figure 1 displays this data by sector. Overall trade associations had total revenues of \$25.6 billion between 2008 and 2018, at an average of \$2.3 billion per year. The largest was the oil and gas sector with \$4.6 billion in revenues. Peak trade associations and the utility sector also had revenues in excess of \$4 billion, with the built environment and the renewable energy sectors having the smallest levels of financial resources. Building on the climate politics literature, we can distinguish between sectors generally opposed to climate change action—coal, rail and steel, oil and gas, transportation and utilities—and those sectors associated with the climate movement, namely

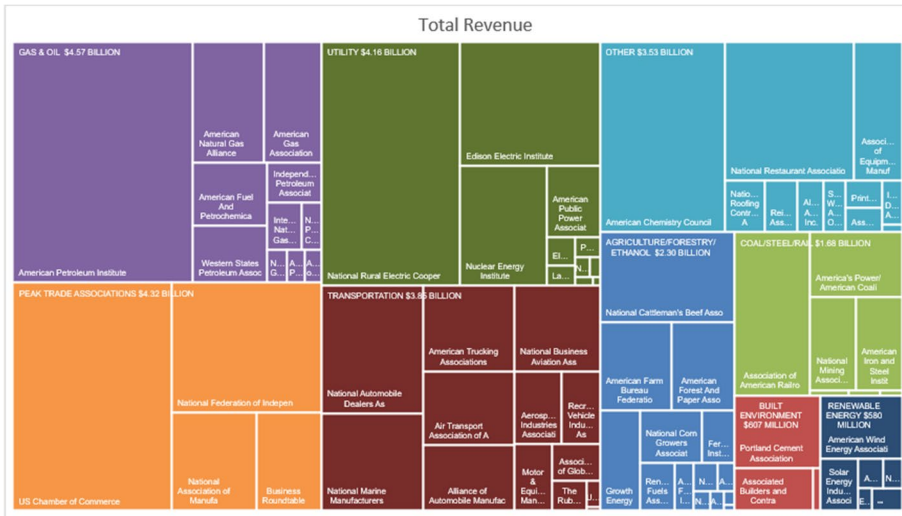


Fig. 1 Total revenue

the renewable energy sector (Brulle 2018, 2020). Trade associations typically opposed to climate change action had total revenues of \$14.3 billion compared to \$580 million in the climate movement. Furthermore, if we include peak trade associations, which previous studies have shown largely side with the fossil fuel sectors in the climate change domain (Downie 2019), opposition revenues total \$18.6 billion. This may be a conservative estimate given recent work has shown that other sectors, such as agriculture, also regularly oppose climate policies given their emissions intensity (Cory et al. 2021).

3.1 Lobbying

Scholars have devoted considerable work to understanding the processes that influence legislative and government policy outcomes (Drutman 2015; Grossman 2014; Schattschneider 1960). The research on business actors has shown that one of the principal political activities firms use to influence political outcomes is lobbying. In the US firms spend between \$3 to \$4 billion lobbying Congress (Brulle 2018). Broadly, lobbying refers to the various activities undertaken by business actors to educate and persuade government decision-makers, with the hope of influencing their decisions (Milbrath 1963: 8). This typically involves personal contact with policymakers, including White House staff, congressional members and government agencies (Baumgartner et al. 2009).

While there is a voluminous literature on lobbying in the USA, only recently have studies begun to explore business lobbying in the domain of climate change (Delmas et al. 2016; Downie 2019; Kim et al. 2016). However, scholars have not assessed the lobbying of trade associations at the federal level, though some recent work has been done at the state level (Culhane et al. 2021). This is despite the fact that previous studies have found that business and trade associations comprise more than half the registered lobbyists in Washington DC, and that trade associations are second only to business for the amount of lobbying activity they undertake (Baumgartner and Leech 2001: 1194–1196). In this section, we seek to determine the total amount spent by trade associations on lobbying and explore

the variations in spending across sectors. This allows us to explore the lobbying activity of trade associations from sectors traditionally opposed to climate policies relative to those that tend to support climate policies.

Our data show that between 2008 and 2018 trade associations spent \$729 million on lobbying, with a yearly average of \$66 million (see Table S-3 for data). The data also show the large variations in lobbying spending by sector. What stands out is that the oil and gas sector is by far the largest spender on lobbying with almost \$200 million spent over the 10 years to 2018. This represents 27% of the total, almost twice that of the next largest sector transportation, which spent \$102 million, putting aside peak business associations. If we compare the amount spent on lobbying by trade associations typically opposed to climate policies versus those that support climate policies, we can see that those sectors opposed outspend the renewable sector by a factor of 14 to 1. This parallels the findings of previous research on climate lobbying (Brulle 2018). If we include peak trade associations in the estimate, the result is 19 to 1.

3.2 Political contributions

Alongside lobbying, political scientists have devoted considerable attention to political contributions. The political mobilization of business in the 1970s, in part in response to the environment movement (Layzer 2012), led business actors to establish Political Action Committees (PACs) to pay for the operating expenses of political campaigns (Milyo et al. 2000). A series of reforms to campaign finance laws in the 1970s, including a decision by the Federal Election Commission in 1975 to sanction corporate PACs, resulted in a proliferation of PACs and political contributions (Waterhouse 2013). In the decades since these reforms, scholars have followed the flows of PAC dollars (Milyo et al. 2000), the variations by industry (Grier et al. 1994) and interrogated why business actors establish PACs (Hall and Wayman 1990).

What these studies show is that spending on lobbying far outweighs spending on political contributions, in some estimates by as much as five or ten to one (Milyo et al. 2000; Bonica 2016). They also indicate that for business actors political contributions tend to occur at the firm level rather than at the level of the trade association. For example, among the 3000 PACs that were active in the 2000 election cycle, 1400 were corporate PACs compared to 670 associated with trade associations or membership groups (Ansolabehere et al. 2003). Again, much of this work is yet to look at the domain of climate change (Ard et al. 2017; Vandeweerd et al. 2016).

In this section, we present findings on trade association spending on political contributions. Consistent with the literature, spending on lobbying easily eclipses spending on political contributions. Trade associations spent \$105 million in the decade to 2018, averaging \$9.5 million per year (see Table S-4 for data). Similarly, corporate spending on political contributions easily outweighs that by trade associations alone. For example, across the four election cycles between 2004 and 2010 corporate spending on political contributions totalled \$862 million (Bonica 2016). As we discuss, this may reflect business preferences to control political contributions at the firm level.

The data also highlight the variations across sectors. In this case, it is trade associations in the utility sector that are the largest political contributors, spending \$24 million, more than twice that of the oil and gas industry, which spent \$11.6 million over the same period. If we again compare the amount spent by those sectors that traditionally oppose climate policies to those that support, we find that those sectors opposed to climate action outspent those in support by a factor of 13 to 1, or 15 to 1 if we include peak trade associations. It

should be noted that while our data captures political contributions trade associations make to PACs, it does not capture spending by trade association PACs. We also likely underestimate total contributions because like most studies we do not capture the political activities of individuals who lead these trade associations (see for an exception Bonica 2016).

3.3 Advertising and promotion

Over the past two decades, an extensive literature has emerged that centers on the rise of promotional techniques to shape political action (Anderegg and Goldsmith 2014; Bennett and Manheim 2001; Greenberg et al. 2011; Palenchar 2009; Walker 2014). These advertising campaigns can be seen as strategic political communications efforts that aim to modify perceptions of key actors and the public to accomplish certain goals. The objective is to bring about a shift in the beliefs of the targeted audience (Collison 2003).

Business actors, including trade associations, tend to engage in two strategies. The first is issue advertising. This is the creation of media messages by an organization to advocate its position on political or social issues (Sethi 1977). They are time limited and focus on a specific issue. A second is image advertising. It is aimed at increasing the legitimacy and reputation of the organization sponsoring the advertising (Tedlow 1979).

As climate change has risen as an issue, corporations have turned to these practices to present themselves as responsible corporate citizens taking appropriate action to address climate change (Aronczyk and Espinoza 2022; Supran and Oreskes 2017). These campaigns aim at increasing the public reputation of the sector, which assists in managing risk, controlling negative media attention and overcoming antagonist civil society groups, thereby decreasing the likelihood of regulatory action. Such campaigns have long been used by fossil fuel companies. In the late 1970s, Shell initiated a public relations program centred on the theme “Come to Shell for Answers” (Shell Oil 1978: 59). Later campaigns included “People Do” by Chevron (Porter 1992), “Beyond Petroleum” by British Petroleum (Driessen 2003) and “Energy Solutions” by ExxonMobil (Plec and Pettenger 2012).

Despite the importance of advertising and promotion campaigns in the climate change domain, there is a dearth of systematic analysis of this political activity by business actors. One exception is a recent analysis by Brulle et al. (2020) that finds that between 1986 and 2015 five major oil corporations spent nearly \$3.6 billion in advertising purchases for corporate promotion. They also find that the levels of spending directly corresponds to levels of Congressional action and media coverage related to climate change. As the perceived level of threat of legislative or regulatory action increases or increased adverse media coverage, major oil companies will expand their efforts to improve their corporate reputation and stave off regulation.

In this section, we extend this literature to trade associations. Trade associations spent \$2.16 billion on advertising and promotion or around \$197 million per year (see Table S-5 for data). As mentioned above, these estimates represent total spending on activities largely designed to either advocate on political and social issues or to improve the image of an industry in ways that advance their broader interests. This can include everything from media buys to promote the reputation of an industry; to the hiring of a public relations firm to target a particular issue before Congress. Again, there are large variations across sectors. The oil and gas sector is easily the largest, with total spending over \$1 billion, representing 47% of all spending. Peak trade associations, agriculture/forestry/ethanol and transportation sectors all spent in excess of \$100 million, with other sectors spending far less. This includes the renewable energy sector, which spent \$30.1 million, or less than 2% of all spending, and the coal/steel/rail sectors which spent \$64.6 million, or just under 3% of total

spending. This is consistent with previous research discussed above that the oil and gas sector is a larger spender on advertising and promotion relative to other sectors. Much like lobbying and political contributions, we again find that those sectors generally opposed to climate change outspent those in support by a factor of 41 to 1, or 56 to 1 including peak trade associations.

3.4 External grants

The final political activity is the facilitation of the activities of other organizations through direct financial grants. Scholars have increasingly documented the transformation of civic non-profit organizations into professional, oligarchic and non-participatory organizations (Fiorina and Skocpol 1999: 499; Putnam 2000; Skocpol 1999: 499; Loomis and Cigler 1998; Brulle 2000; Zald and McCarthy 1987; Hayes 1986; Jordan and Maloney 1977). One key aspect of this professionalization is the increased use of foundation funding to build and maintain these organizations (Walker 1991; Brulle 2000). This financial support has had a major impact on the priorities, strategies and organization of civil society organizations. A popular image is direct cooptation in which foundations offer support in exchange for the adoption of specific actions by civic organizations. While some direct cooptation does occur, the general pattern is far more complex and is better described as “channelling”. Instead of explicit directives, foundations largely work indirectly by promoting organizational competition and selecting organizations that fit their priorities (Dowie 1995).

Several studies have examined foundation funding in the domain of climate change (Brulle 2014; Jenkins et al. 2017). However, paralleling the literature on lobbying, political contributions and advertising and promotion, scholars are yet to examine the extent to which trade associations fund civic organizations. Our data allows us to address this gap in the literature. We find that between 2008 and 2018, trade associations spent a total of \$394 million on external grants to other organizations or almost \$36 million per year (see Table S-6 for data). As we discuss below, these grants went to a raft of different organizations, including political organizations, such as governors’ associations, think tanks, universities, charitable foundations and even museums and historical societies. Once again, trade associations in the oil and gas sector were the largest spenders with approximately \$105 million in external grants, followed closely by trade associations in the transportation sector, which spent \$102 million over the same period. The coal/steel/ rail sectors and the utility sector spent \$52.6 million and \$44.5 million respectively, with all other sectors funding a much smaller level of external grants. Mirroring the findings above, trade associations associated with climate change opposition outspend trade associations in the climate movement by a factor of 33 to 1.

3.5 Overall political activity

In summary, between 2008 and 2018 trade associations spent an estimated \$3.4 billion on activities designed to shape their political environment. This was equivalent to 13% of their total revenues (see Table S-7 for data). As Fig. 2 shows, the oil and gas sector is by far the largest, spending \$1.3 billion on political activities. No other sector spent in excess of \$1 billion. The next largest was peak trade associations, which spent \$637 million. The oil and gas sector was also the largest spender across all political activities, except for political contributions, which was the utility sector. If we compare spending by sectors generally

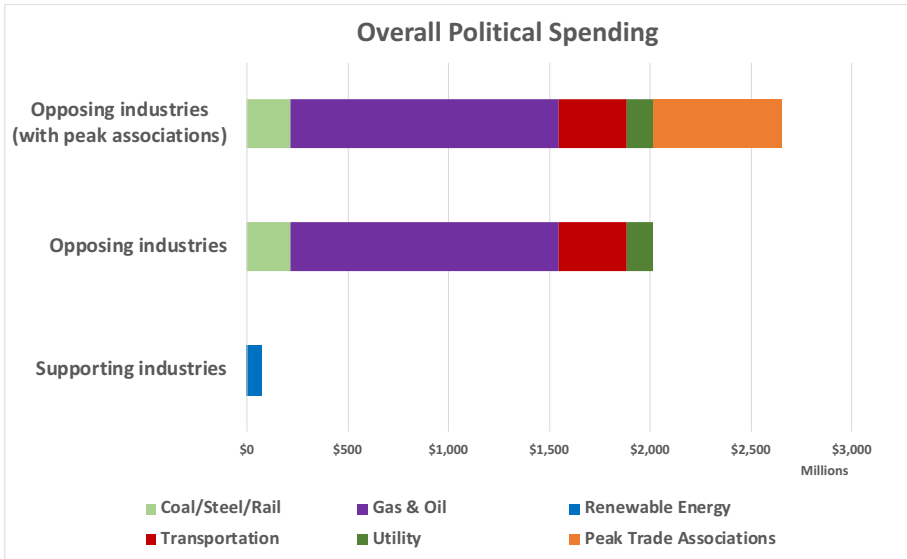


Fig. 2 Overall political spending

opposed to climate action to those in support, the result is approximately \$2 billion to \$74.5 million or \$2.7 billion to \$74.5 million if we include peak trade associations.

Furthermore, as Fig. 3 shows, trade association’s principal political activity, measured by spending, was advertising and promotion. Total spending on advertising and promotion totalled \$2.2 billion, more than three times that spent on lobbying over the same period, which equalled \$729 million. Figure 3 also highlights that spending on political

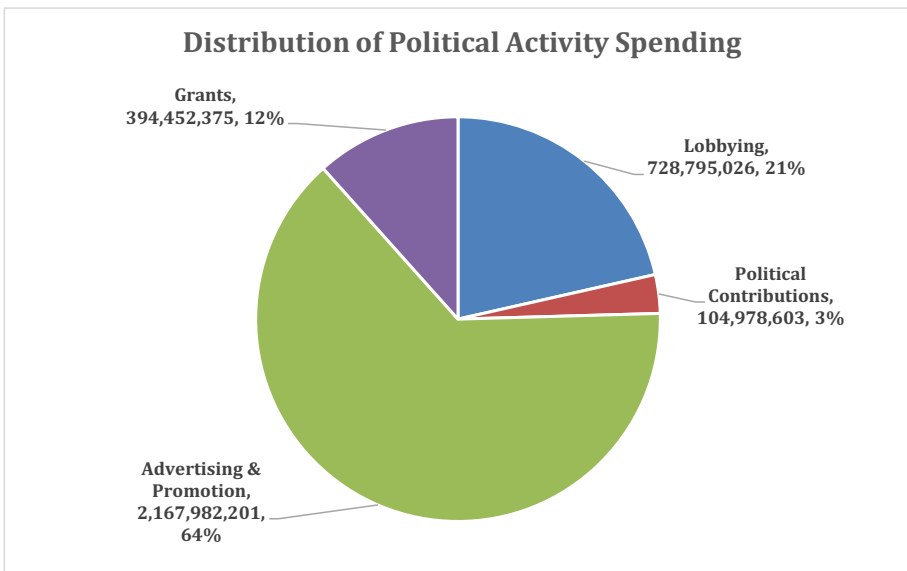


Fig. 3 Distribution of political activity spending

contributions was the smallest of all four political activities, representing just 3% of total spending. Indeed, spending on external grants, the third largest political activity was four times that spent on political contributions, totalling \$394 million. As we discuss in the final section, these findings challenge some of the prevailing assumptions in the literature about business political activity.

4 Relationships and drivers of political spending

To identify the factors that influence overall political spending, we carried out an examination of the influence of total trade association revenue and economic sector on both different categories and overall levels of political spending. We conducted a pooled regression analysis where the independent variable consisted of the average total annual spending of each trade association in five separate categories: grants, lobbying, advertising & promotion, political contributions and total political spending, which is the sum of the four categories of spending. The dependent variables consisted of the average total annual income of the trade association, and a dummy variable for the sector the trade association represented. This created a data set of 71 cases for examination. We ran five separate regression models as shown below in Table 1.

The analysis clearly shows that the total revenue of the trade association is a highly significant factor across all components of political spending. Institutional resource capacity is a major factor in determining the extent of trade association political spending. Looking across the different sectors, there are clear differences in the extent of politically related spending. Trade associations in the gas and oil sector engage in a high level of public relations spending, even after controlling for the large resource levels of these trade associations. They also spend significantly more amounts of their total income in total political spending. Transportation sector trade associations spend significantly more than other trade associations on grants to other organizations. Trade association in other sectors shows slight but statistically significant differences in levels of political spending across the different categories of spending. Further empirical analysis of these different spending levels is needed (Table 1).

5 Explanations for variations in political activity spending

What can explain this striking variation in political activity spending? In this section, we examine four possible determinants: the role and functions of trade associations; industry characteristics; the nature of the issue and effectiveness. Traditionally studies of business political activity focussed on what leads business to mobilize (Schattschneider 1960; Olson 1965). More recent studies focus on one activity, such as lobbying or political contributions, and explore the possible determinants for changes in the level of activity (Hojnacki et al. 2012; Grier et al. 1994; Anderegg and Goldsmith 2014). For example, Bombardini and Trebbi (2012) explored industry level characteristics as determinants of lobbying, Brulle (2018) focussed on issue salience and Drutman (2015) has argued that lobbying is “sticky”, because past lobbying begets future lobbying. While we draw on this work, our focus is not on changes in the level of a political activity, but rather on the choice activity.

Table 1 Regression estimates of types of political spending (unstandardized coefficient with standard error below)

Independent variable ^a	Model 1 Grants	Model 2 Lobbying	Model 3 Advertising & promotion	Model 4 Political contributions	Model 5 Total political spending
Constant	-504,718 742,202	-1,933,197 1,215,175	-9,922,785* 4,678,894	92,305 117,632	-12,268,395 + 5,721,145
Total revenue	0.013*** 0.003	0.043*** 0.005	0.149*** 0.018	0.003*** 0.000	0.208*** 0.022
Gas & oil sector	850,387 953,781	2,362,964 1,561,582	11,790,405 + 6,012,698	-116,293 151,165	14,887,464* 7,352,062
Utility sector	358,323 977,380	-820,678 1,600,220	-2,393,025 6,161,468	111,345 154,905	-2,744,035 7,533,971
Renewable energy sector	553,266 970,984	2,078,634 1,589,748	8,878,247 6,121,148	-55,070 153,891	11,455,077 7,484,670
Agriculture/forestry/biofuels sector	291,819 900,338	1,235,222 1,474,083	9,994,712 + 5,675,791	-25,023 142,695	11,496,730 6,940,106
Built environment sector	1,745,166 1,365,761	918,075 2,236,100	5,661,954 8,609,851	389,408 + 216,460	8,714,604 10,527,746
Peak trade associations	-1,092,099 1,280,448	597,622 2,096,421	1,274,891 8,072,034	-358,191 + 202,938	422,223 9,870,126
Transportation sector	2,797,272*** 1,005,371	333,381 1,646,049	2,147,679 6,337,927	-76,496 159,341	5,201,840 7,749,737
Coal/steel/rail sector	108,584 1,153,127	3,409,807 + 1,887,964	5,652,477 7,269,394	-29,228 182,759	9,141,641 8,888,694
Sample size	71	71	71	71	71
R ²	0.377	0.632	0.582	0.487	0.639

^aReference category for the sector variable is other sector

Notes: Analysis of VIF indicated no multicollinearity between variables; Durbin Watson statistic indicated no autocorrelation between variables + $P \leq 0.1$; * $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$. Two-tailed significance tests applied to all variables

Explaining this variation is important for a couple of reasons. First, what trade associations do matters. Trade associations provide coherence to industry political activities helping firms to prioritize issues, strategies and build coalitions across and beyond the industry to contest policy debates (Downie 2019; Drutman 2015: ch 5). Second, despite their importance in playing this role, there has been very little systematic research on trade associations' choice of political activity. Indeed, there has been limited effort to draw together the different strands of work in political science on lobbying, political contributions and work in related fields, such as sociology on public relations and grants to make sense of trade associations' overarching political strategy.

Accordingly, to explore the possible determinants of a trade association's choice of political activity, we conducted 23 semi-structured interviews. We targeted "Presidents/CEOs" and "Vice Presidents of Government Affairs/Public Affairs" because in trade associations these are the individuals typically responsible for overseeing political activity and deciding which strategy to pursue (17 interviews). In doing so, we sought divergence across the nine sectors in our sample. All respondents were asked about the strategies they chose to shape their political environment, with prompts to probe the possible explanations identified in the literature. To explore these explanations further, we conducted additional interviews with key member firms, and lobbying and public relations firms that work with these trade associations (6 interviews). These interviews largely corroborated the explanations provided by trade association respondents (see Supplementary Material for a full description). In what follows, we consider each possible explanation in light of the interview data.

First, the role and functions specific to trade associations are likely to affect the choice of political activity. Arguably, the principal role of trade associations is to shape an industry's political environment and manage its reputation to ensure that it has a social licence to operate (Lawton et al. 2018; Tucker 2008). Studies suggest that two political activities are likely suited to this role. One is public relations activities to maintain and promote an industry-wide reputation and a social licence to operate (Harvey and Bice 2014; Marchand 1998; Beder 2002; Hoggan 2009). Another political activity is the use grants as part of a larger strategic effort to shape the political environment, for example, by funding the production of scientific knowledge in ways that converge with business interests (Himmelstein 1997; Gautier and Pache 2015; Guilhot 2007; Elsbach 1994).

We explored these explanations by asking respondents to what extent the roles and functions of trade associations affected the choice of political activity. As we would expect, all respondents stated that managing the industry's reputation is "something trade associations just do because our membership wants us to do it" (interview 1). For most associations this means public relations campaigns, though interviewees noted that industries with poor reputations generally spend more on such activities (interview 2). Another way trade associations protect the reputation of firms is to run negative public campaigns that firms do not want to be associated with (interviews 3 and 5). As one VP of Government Affairs explained:

companies are members of associations for a reason, they don't want to be the name on the door, they don't want to be the tip of the spear, they want you to do that, so that they are a step removed from some controversial issue (interview 12).

When asked how the role of a trade association affects their use of other strategies beyond public relations, there was some evidence to support the contention that grants are used to structure scientific knowledge and manage relations with communities in which

their industry operates. For example, respondents described how grants to think tanks and universities are used when a trade association needs a “multi-industry research paper written” to bolster a campaign (interviews 8, 10 and 11). Interestingly, many respondents did not view political contributions as a key part of a trade association’s role, partly explaining the limited spending on contributions relative to other activities. For example, one interviewee noted that until recently their member firms had directly prevented them from establishing a PAC, because they wanted to control political contributions at the firm level (interview 4).

Second, studies of business political activity tend to suggest that industry level characteristics, such as industry size, market structure, the degree of government regulation and firm headquarters are important predictors of political activity. For example, studies find that large industries are more likely to engage in lobbying and have politically active associations (Drope and Hansen 2009) and that trade associations in these industries with larger staff are more likely to engage in lobbying as well (Saitgalina et al. 2020). Others have highlighted the importance of market structure (Bombardini and Trebbi 2012), the extent to which government regulates a firm or an industry (Hansen and Mitchell 2000), and the geographic headquarters of a firm as determinants of business political activity (Downie 2017; Levy and Kolk 2002). While much of this scholarship seeks to explain the level of a particular political activity, we could expect that these factors will also affect the choice of political activity.

We explored these explanations by asking respondents how the size and structure of their industry affected their choice of strategy. Consistent with the findings of our regression analysis, multiple respondents stated that the level of spending on political activities is a correlate of a trade association’s revenues. In addition, several respondents claimed that trade associations with smaller budgets tend to be cautious about spending on political contributions and grants. As one put it, “to be quite frank, we don’t have the budget for that” (interviews 6 and 15). As another explained, in reference to grants, “you have to look at your budget and membership, is your membership willing to pay for additional items?” (interviews 8 and 19). Although we did not ask directly about whether the geographical headquarters of member firms affect their political strategy, respondents did not raise it, perhaps suggesting that these factors matter more at the firm level than at the level of trade association.

Third, there is a large body of literature that considers the relationship between the characteristics of the issue and the level of business political activity (Baumgartner and Leech 2001; Brulle et al. 2020; Caldeira et al. 2000). For example, Baumgartner et al.’s (2009) landmark study on lobbying found that challenges to the status quo tend to be more politically active than those seeking to defend the status quo, and that challengers are more inclined to use outside campaigns to convey the salience of an issue to lawmakers and create incentives for them to address it. In other words, the intent of the actor matters to the choice of strategy. Hence, in some cases, business actors may not prefer “quiet politics” (Culpepper 2010).

When asked whether the type of issue shaped the choice of strategy, responses were mixed. Some argued “it really depends on the issue”, others were not so sure (interview 12). What was clear is that the need to draw attention to an issue drives spending on advertising and promotion. As one respondent explained: “getting the attention of the news media was a key challenge” (interview 3). However, others argued that while challengers to the status quo use outside campaigns, defenders of the status quo can also do the same. As one VP of Government Affairs explained when attempting to defeat the Waxman-Markey bill in President Obama’s first term in office: “when the climate change bill came up in 2009 it was a priority issue

for our organization, we did a national campaign and it was very effective” (interview 7). In many cases, this involved hiring PR firms to help run specific campaigns on behalf of the trade association (interview 4).

Finally, it could also be expected that a trade association’s choice of political activity will be a function of its effectiveness. In other words, trade associations will choose strategies that they believe are most likely to achieve their aims. While there is considerably scholarly interest in understanding effectiveness, as Figueiredo and Richter (2014: 168) point out, doing so is “extraordinarily challenging” because of the difficulty in isolating causal mechanisms, and the results of studies that attempt to do so are mixed (Ansolabehere et al. 2003). In this context, Milyo et al.’s (2000: 76) conclusion that business actors’ level of spending on political activities is suggestive of their importance might be more helpful. Given our data, we might hypothesize that the fact that trade associations spend considerably more on advertising and promotion and lobbying, than they do on grants and political contributions means they view these activities as more effective.

Our interview data tentatively confirm this. When asked about the effectiveness of different strategies, several VPs of Government Affairs questioned the benefits of grants and political contributions claiming, “I’m not sure what it buys you?” (interview 6). As another explained: “for many years we were the sponsors of the Western Governors Association... we finally decided to stop...it was just hard to demonstrate the cost-effectiveness of these types of expenditures” (interview 2). However, others argued the value is in the access it buys: political contributions “give you much more face time with legislators” (interviews 12, 16 and 18). Or as another explained, grants to charities, such as the Alzheimer’s Association, give you a seat at a fundraising table with a senator “where you can gently remind them of your issue” (interview 20).

In summary, from our initial exploration, we find most support for the relationship between the role and functions of a trade association and political activity spending. One key reason that trade associations spend more on advertising and promotion than any other activity appears to result from their role in maintaining the public reputation of the industry, whether it is via positive campaigns to improve the brand of the industry, or running negative campaigns so that the reputation of member firms will not be tarnished. The qualitative data also suggest that the greater amount spent on advertising and promotion and lobbying also reflects the perception that these activities are generally more effective. Hence, trade associations with smaller revenues tend to prioritize public relations campaigns and lobbying before devoting resources to grants and political contributions. Support for the relationship between the characteristics of the issue and the choice of political activity was mixed with some respondents arguing that it played a role, with others less certain. Although these relationships are indicative only, they provide a basis for further work, including via in-depth case studies, to examine the driver of trade associations’ political activity.

6 Conclusion

In recent decades, business actors have increased their spending on political activities in the U.S. (Drutman 2015; Milyo et al. 2000). However, in the literature on business, the focus has been on firms. Trade associations are generally only considered as part of wider advocacy coalitions. We contribute to this literature by zeroing in on trade associations that engage on climate issues and the wide range of political activities they undertake. This is important because the political activities of business actors in industries that produce and

consume fossil fuels have proven to be one of the key reasons why government efforts to implement climate policies have failed (Brulle 2018; Cory et al. 2021; Downie 2019).

We find that trade associations spent \$3.4 billion on political activities between 2008 and 2018 and that associations generally opposed to climate change action spent an estimated \$2 billion, compared to \$74.5 million for industries that traditionally support climate action. Our results are likely to accentuate concerns about the role business actors can play in blocking climate action in the USA.

The empirical approach we employ to reach these conclusions allows us to make several contributions to the existing literature. First, the dataset built from IRS 990 filings allows us to disaggregate political spending by political activity type. To the extent that trade associations have been considered, most studies look at the population level dynamics or distinguish broadly between activity areas, such as political and commercial (Aldrich and Staber 1998; Staber and Aldrich 1983). Instead, our approach highlights not only the variety of political activities, including those that are often overlooked, such as grant giving, but it also enables us to quantify their importance, based on spending.

Second, whereas much research focusses on changes in the level of one political activity, such as lobbying, by comparing political activity spending, we are able to explore a question that is often neglected in the literature: what explains the choice of political activity? We find that while trade association revenues are highly correlated to the levels of spending, the focus on advertising and promotion, may also reflect the role that trade associations play in protecting the reputation of the firms they represent. This is important because it helps us to understand the possible divisions of labour between firms and trade associations and how their strategies are linked or not. A question that remains understudied in the literature (Dadush 2017; Kowal 2018).

Our findings are not without limitations. Our assessment of the disparity in political activity spending between trade associations opposed to climate change action versus those that support action are indicative only. While our estimates are based on previous research showing that industries, including coal, rail, steel, utilities, oil and gas traditionally oppose climate policies (Brulle 2020), in some cases, industries hedge their bets supporting and opposing the same policy (Downie 2017; Meckling 2015). Still, we expect that our assessment underestimates the disparity, given that industries that we do not include as opposed to climate policies, such as agriculture, are also frequently associated with climate opposition, which was also confirmed in our interviews (Cory et al. 2021).

A second limitation is that explanations for variations in political spending only speak to the views of CEOs and government affairs representatives in trade associations. Member firms may hold different perceptions. However, given that these individuals are often making the decisions about where to allocate spending their views matter. Furthermore, we think that there are unlikely to be wildly contrasting views given our supplementary interviews with key member firms largely corroborates the accounts of trade association respondents.

A third point to raise is that while our empirical approach allows us to estimate total political spending, it does not allow us to determine the percentage spent specifically on climate change issues, given the data disclosed in IRS 990 forms. Hence, we do not assume that every dollar spent was directly on climate change. However, in light of the interview data and trade association mandates, we do believe it is reasonable to assume that spending on political activities is designed to shape the political and social environment in ways that advance the commercial interests of the industries they represent. For example, our spending estimates exclude spending on other activities, such as organizational operations, which are not for

political purposes. In addition, because our estimates cover political spending across a decade, they are likely to be more robust than studies bounded by a particular Congress.

While our data show the importance of different political activities to trade associations, given the paucity of research on trade associations, they are rarely theorized together, even though trade associations employ them in combination. For example, how do these activities complement each other? In what sequence are they typically employed? And why? Our qualitative data provide some clues, but in-depth case studies and further theorizing would advance the field.

Future research should also extend this work to the state level (Culhane et al. 2021). Many respondents conceded that partisan gridlock in Congress has forced trade associations to be more politically active at the state level. While some industries, such as the utility industry, have long been politically active at the state level because of how their industry is regulated (Williams et al. 2022), others have not, and there are likely to be important variations in political activities.

Ultimately, our findings highlight the sum of trade associations' political activity, and the important role they can play as opponents of climate action. Whether future research focuses on the climate domain, or other policy domains, there is no doubt that trade associations' political activities, and the variations in those activities, are a topic that deserves much more scholarly attention.

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Data availability The quantitative data files underlying this article will be made publicly available at publication by request to Dr. Robert Brulle.

Declarations

Ethics approval Approval from ANU ethics committee.

Consent for publication Both authors consent to this submission and have approval for this work.

Competing interests The authors declare we have no conflict of interest associated with this manuscript.

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