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Partisanship and Special Interest Influence on Environmental Policy as Illustrated through
Statewide Plastic Bag Policies

by

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Introduction

Prior to its advent in 1869, the world had zero plastic. In 1907, when a fully synthetic version of the polymer we now call plastic was invented, humans reveled in the idea that they were no longer constrained by the limits of what natural resources could provide. Through World War II, the uses for plastic grew exponentially, continuing post-war as a seemingly endless number of plastic products became available to the public (Science History Institute).

Demand for this material has not subsided since, and it is now estimated that 300 million tons of plastic are created annually (Paco, 2017). Much of this ends up in the ocean, where an estimated garbage truck load of plastic enters the ocean every minute. By 2050, that number will quadruple, and there will be more plastic in the ocean than fish (Caverly, 2019). When plastic makes it to a landfill, it takes hundreds of years to decompose (State Legislature, 2007).

Many cling to the concept of recycling as a means of managing this waste stream. However, only nine percent of plastic waste is recycled (Caverly, 2019), and this number is going down. Recycling is not a solution to plastic waste, and not only because people are not choosing to recycle. There is more plastic waste that is captured with the intention of recycling it than can actually be recycled. Up until 2017, China was receiving 45 percent of the world's plastic waste (106 million metric tons since 1992). However, this resulted in China polluting the air so severely that they enacted their National Sword policy and halted acceptance of nearly all plastic from other nations due to human health and pollution concerns. The United States was one of the top exporters of plastic to China and now must send its cargo ships filled with plastic to other countries, none of which can take on the amount China had been accepting, resulting in even more plastic entering landfills (Watson, 2018).

With this endless stream of plastic waste still being generated, and seemingly nowhere to put it and no way to recycle all of it, single-use plastics – those intended to be used once and discarded – are particularly problematic. While there are products such as medical devices that ethically one can argue serve a greater purpose in sustaining human life, plastic bags and plastic to-go containers that exist simply for convenience and are used once and thrown away are harder to justify.

Many areas across the world and across the United States have chosen to regulate plastic as a way of curtailing this waste stream. This effort is often led by regulating plastic bags first since plastic bags are a high use product with a staggering environmental impact. This paper looks specifically at plastic bags because of the focus that has been placed on them from a regulatory standpoint, environmental standpoint and special interest standpoint.

Americans use 100 billion plastic bags annually, which requires 12 million barrels of oil to produce (Applebome), meaning they have a significant impact on the environment. However, not everyone wants plastic bags regulated. Of the \$4 trillion global plastics industry, plastic bags and plastic “pouches” are a \$22.2 billion global industry, with the United States portion estimated at over \$10 billion, making this a formidable sector of the economy (Maldonado, Ritchie and Kahn, 2020; Lerner, 2019; Statista Research Department, 2019). Organizations that represent the plastics industry in the United States – namely the American Chemistry Council (ACC), the Plastics Industry Association (PIA), and the American Recycled Plastic Bag Alliance (APBA) (formerly the American Progressive Bag Alliance) – participate in efforts to protect plastic bag use through lobbying and funding of candidates, among other things.

The opposite of a statewide plastic bag ban is statewide preemption laws. These laws – which essentially *ban* plastic bag bans – prevent local municipalities from imposing bag bans at

lower levels of government, effectively making bag bans illegal and thereby safeguarding the manufacture of plastic bags. Some suggest that a reason to pass preemption laws is so that a state will have uniform laws throughout, arguing that it will be too confusing for citizens to keep track of where they can and can't receive plastic bags if municipalities are allowed to have their own laws. This is but one form of messaging used to justify the reversal of laws supported by citizens of certain cities like Minneapolis which passed a plastic bag ban that became invalid after statewide preemption (Williams, 2017). The plastics industry has worked to push the concept of recycling and get the messaging out that alternatives to plastic bags cause more environmental damage even though this has been disproven. This argument has been used to rationalize preemption laws, and the plastics industry has spent millions of dollars on this messaging (Ballotpedia). They have fought against ballot measures seeking to restrict plastic bags and funded campaigns for candidates at the federal and state level. The plastics industry has injected a considerable amount of money into the political sphere in order to protect their products and their income stream by influencing politicians. As an example, Helix Poly is one of the major plastic bag manufacturers in the country. They are housed in Idaho where a state lawmaker who represents the district that houses Helix Poly's plastic packaging facility proposed a preemption bill that led to the prohibition of plastic bag bans in the state (Times-News, 2016).

In order to study these topics, this paper investigates several hypotheses. The first deals with the issue of plastic bag legislation and understanding how partisanship is related to plastic bag policy. Since a goal of this research paper is to better recognize conditions under which plastic bag bans or preemptions are likely to occur, one of the most significant components of the issue is whether there is a partisan aspect to plastic bag bans. There has been much research done on the partisan divide concerning environmental issues. Gray et al. (2018) state that it is widely

believed that states with Democratic leadership will support environmental policy more than Republican led states. However, while they mention studies that have illustrated this empirically, they also provide examples of the opposite being true – where a Republican governor enacted progressive environmental law, and a Democratic governor restricted environmental law. Nevertheless, it is plausible to hypothesize that plastic bag legislation may follow the general trend where Democrats support regulating it and Republicans do not.

Based on this, the following Hypothesis 1 and Hypothesis 2 have been developed and will be explored here:

H1: Plastic bag bans will occur less in historically Republican states than in historically Democratic states.

H2: Preemption laws prohibiting plastic bag bans will occur less in historically Democratic states than in historically Republican states.

Additionally, this research looks at whether or not there is a relationship between the amount of interparty competition in the state, as presented in the Ranney competition index (Gray et al., 2018). The commonly used Ranney index, from which the Ranney *competition* index is calculated, was developed by political scientist Austin Ranney in his 1965 publication “Parties in State Politics.” It is a measure of the strength of the Democratic Party, over a specific period of time, in state government, accounting for the proportion of seats in House, Senate and governor’s elections that are Democratic (Holbrook and Van Dunk, 1993). Based on this number, the Ranney competition index is calculated for each state, and it is this Ranney competition index that is used in this paper. (See the Methodology section for more detail on the calculation).

It is anticipated that where there is less party competition, it is easier to pass either a plastic bag ban or preemption because more competition from the opposing party would make it harder to enact those laws – which is another indicator as to whether or not plastic bag legislation is a partisan issue. Looking at both competition and partisanship will help to create a better picture of the political aspects that may or may not influence plastic bag legislation. As such, the following Hypothesis 3 has been created.

H3: Statewide plastic bag policies (either preemption or bag bans/fees) will occur more in states with a lower Ranney competition index.

In addition to these three hypotheses, a discussion on the ways the plastics industry has sought to influence policies in the United States is presented. While the plastic bag policies being examined in this paper are at the state level, there is a debate going on at the federal level, as well. Information on the campaign contributions and lobbying efforts from the plastics industry at the state level is not readily available and could not be located for each state during the writing of this paper. However, there is a robust amount of data available at the federal level. Since looking at the financial contributions made at the federal level can illustrate if there is a partisan trend in how the plastics industry spends their money, these data are examined here.

One exception to the lack of state data is the state of California which does have a robust set of data that has been made publicly available. This includes both campaign contributions to state candidates and lobbying efforts specific to state plastic bag ballot measures. An analysis of this data is also done to illustrate if there is a partisan trend at the state level in California. However, it is important to note that since only California is being examined at the state level, it would be inaccurate to assume the findings there are representative of all states since there are possibly unique circumstances in California that could make it an outlier. Further study would be

required to examine campaign and lobbying contributions from the plastics industry in all states before drawing any significant conclusions.

Below is a literature review, followed by a discussion on the methodology used in each area of research, and finally the results and conclusions are presented.

Literature Review

Plastic waste is a concern across the globe (Ubomba-Jaswa and Kalebaila, 2020). To preserve human and ecological health, there have been calls to classify plastic waste as hazardous (Rochman et al., 2013) and to consider classifying it as a planetary boundary threat since it poses a significant threat to sustainability (Villarrubia-Gomez et al., 2017). Scientists estimated that in 2010, 275 million metric tons of plastic waste were generated in 192 coastal countries and that 4.8 to 12.7 million metric tons of plastic entered the ocean. This amount is predicted to increase by order of magnitude by 2025 (Jambeck et al., 2015). Additionally, the ecological, social, and economic impacts of marine plastic are expansive (McLgorm, 2011), with the economic cost estimated to be between \$3,300 and \$33,000 per tonne of marine plastic entering the oceans per year (Beaumont et al., 2019), impacting tourism (Jang et al., 2014; Willis et al., 2018).

The negative impacts of the commonly used plastics on humans and wildlife has been well documented with regards to microplastics and nanoplastics (Rodrigues et al., 2019). These materials have long polymer chains that can be toxic, resulting in human and environmental hazards due to their polymer matrix, additives, degradation products, and adsorbed contaminants. Exposure to microparticles and nanoparticles of polyethylene, which plastic bags are made of, had a significant negative impact on microbes in the marine environment (Machado, et al., 2020) and exposure to other microplastics such as polystyrene, which can be found in disposable

cutlery, can impact reproduction in marine life (Sussarellu et al, 2016). Human consumption of microplastics through the consumption of fish and other affected seafood, which accounts for 17 percent of animal protein consumed by humans, is but one avenue for human uptake of plastics since microplastics have been found in beer, honey and sea salt (Smith et al., 2018). The negative impacts of plastics on humans, which include physical and chemical toxicity, continue to be studied but are of particular concern for children (Smith et al., 2018). With the impacts of microplastics on marine life being well documented and the ability to remove these particles from the oceans being virtually impossible, reducing the use of plastic by humans is the only feasible method of stopping this pollution source (Galloway and Lewis, 2016).

Reducing the use of plastics as a whole can be accomplished by targeting plastics that are non-essential. While plastics used in life saving medical devices serve a purpose that arguably justifies their existence, other single use plastics are less essential. This category would include items such as plastic shopping bags, plastic cutlery, and other to-go containers. Of the 300 million tons of plastic produced annually, 50 percent is for single-use purposes (Plastic Oceans; Paco, 2017).

The use of plastic bags is staggering, and in 2014, there were 103.465 billion single-use plastic bags consumed in the United States (Wagner, 2017). While plastic recycling as a whole has been impaired globally since China enacted its National Sword policy, these bags in particular are difficult to recycle, can harm automated recycling systems, and are a significant source of litter both on land and in marine waters (Wagner, 2017; Caverly, 2019; Applebome). The logical step would be to limit the use of these products as a way of reducing the consumption of non-essential plastics. Some believe Congress should use its Commerce Clause Powers to enact federal legislation on single-use plastics (King, 2019), but others oppose placing

restrictions on the use of plastics, with plastic bags receiving a great deal of focus from a legislative standpoint where statewide preemption laws have rendered it impossible for local municipalities to restrict plastic bag use. Due to this focus that has been placed on plastic bags, this paper looks at them specifically. Often, they are the first single use plastic to be regulated and therefore can be seen as a gateway product that may lead to the regulation of other single use plastics. For example, this regulation sequence is exactly what occurred in Seattle (Wu, 2018).

In looking at the partisan nature of these policies, it is interesting that while there have been numerous articles written by news sources, in trade publications, and on individual websites, little academic research has been conducted on the topic. Instead, the closest academic literature in the field to this issue comes from scholarship on climate change. Therefore, this related topic is examined herein.

Party polarization has deepened at every level in recent years, extending far beyond policy preferences such that it is now part of virtually every aspect of popular environmental thought (Guber, 2013). Gallop polls from 1998 to 2008 show that when asked if people believe global warming has already begun, Democrats' belief increased by thirty percentage points, from 46 percent up to 76 percent, while Republicans' belief decreased in that same period from 47 percent down to 41 percent (Guber, 2013). Additionally, Republicans increasingly believe that the media exaggerates the concern over global warming, and they believe warming trends are not anthropomorphic but are the result of natural causes. Since *An Inconvenient Truth* was released, the number of Americans who believe we have solid evidence of global warming has gone from 77 percent down to 59 percent. This they mainly attribute to the views of Republicans. (Guber, 2013).

The idea that climate change was a hoax dates back to articles from the early 1990's, which focused on it being a form of environmental colonialism by environmentalists to bolster their antimarket/anticonsumption campaigns or as a ploy by scientists to enhance research funds (Cass, 2010). While in the United States this issue is politically linked, in much of the world climate change is a topic that is widely believed and not politicized (Collomb, 2014; Lahsen, 2005). In Europe, there are fringe actors who assert climate change is not real, but unlike in the United States, where these voices are given a legitimate media platform and have real access to powerful figures in Washington, in Europe they are widely discredited (Collomb, 2014). Wealthy conservatives and those with vested interest in fossil fuels drive climate change denial based on the words of small groups of perhaps ten scientists who deny climate change. Unlike in Germany, Sweden and England, where there are perhaps a few skeptics, in the United states these efforts result in large resistance movements where these few scientists are regarded with authority (Lahsen, 2005, 143).

This variation between the United States and other countries provides an important observation in that it lends itself to the idea that in the United States, there is a pattern of Republican behavior where even in the face of worldwide scientific evidence and scientific consensus, beliefs about topics of environmental concern are dismissed. This distinction is important when considering the topic of plastic bag policies in that even when the scientific evidence is present, it is plausible to hypothesize that policy choices of Republican candidates will be divergent.

In an effort to understand why there may be support for the continued use of a product that causes negative impacts to humans and the environment, literature on interest groups is examined. Interest groups have long been studied in their influence on politics (Dur, 2019;

Holyoke, 2020). Campaign contributions from interest groups are found to occur due to an interest in influencing election outcomes or influencing policies (Grossman and Helpman, 1996). Increased spending afforded by interest group donations allows candidates to reach uninformed voters or to otherwise mobilize voters. Presumably, in return, the candidate will support the needs of the interest group once he or she is elected. This can result in the interests of these groups being put ahead of the average voter. It has been found that interest groups are more likely to target the party with greater chances of winning an election (Grossman and Helpman, 1996).

In the case of interest group influence, studies show that where there is strong support for a policy from interest groups in favor of it, only then are opposing interest groups relevant. Using renewable energy as an example, it was found that while data showed a positive effect on the growth of renewable markets when there were strong support coalitions, this effect was diminished by how strong the manufacturing industry was in that area. This supports the notion that the strength of the manufacturing presence in a given region has an impact on environmental policy or why there may be less interest group activity in regions where there are less environmental actors.

Along similar lines, party competition may have an influence on policy, as well. Where the race is closer, interest groups on either side may be more motivated to engage. The use of the Ranney competition index, which has been used in other studies and is well regarded (Gray, 2018; Flavin and Shufeldt, 2016; Holbrook and Van Dunk, 1993), is used in this study to examine the linkage between party competition and plastic bag policies.

As with any change to an industry as large as the plastics industry, restricting plastic bag use would have negative impacts, as well. A study in Jordan shows that there would be an impact

to jobs if there were full or partial bans put in place, with some estimates showing 46 percent of jobs in plastic bag manufacturing facilities could be lost, or more if factories were shut down altogether (Saidan, Ansour and Saidan, 2017). One area that could offset that job loss would be to increase the production of reusable bags (Surfrider Foundation). There are studies that show a higher footprint from reusable bags on the environment, claiming the impact of single-use plastic bags is lower than the alternatives (Rujnic-Sokele and Baric, 2014). However, it is important to consider the reduced impact of reusable bags when reuse rates are high and when taking into consideration a littering indicator (Green and DeMeo, 2012; Civancik-Usla, et al., 2019). It can be argued that these studies do not quantitatively account for the aforementioned impacts on marine life from plastics being present in the environment. While it is true that the volume of plastic in the oceans is not only from plastic bags, reducing the use of plastic bags is a first step towards reducing other single use plastics, which is a necessary step toward achieving the overall plastic waste reduction necessary to make a significant change in our current unsustainable trajectory.

The research presented here will seek to evaluate possible partisan patterns and will examine the efforts done by interest groups in the plastics industry to influence politicians. As little to no academic work has been previously written on this topic, this research should fill a gap of understanding the impact of partisan politics and special interest monies on plastic bag laws and provide a beneficial analysis for use in the field.

Methodology

This research involves three hypotheses with several sets of data that support this effort.

The first set of data is used in both analyses and involves statewide policy research. For this paper, plastic bag policies were examined – which includes both preemption and statewide

bag bans/fees – in all fifty states and the District of Columbia to find any policy that is either fully enacted or has passed at least one chamber of the state legislature. The source of these data is each individual state legislature, and the findings presented here are current as of June 2020.

The second set of data is the historical partisanship of states that have plastic bag legislation. State government data is used rather than federal election patterns because the plastic bag policies are passed at the state level. Therefore, the state government makeup is of increased significance.

This effort involved compiling data presented by the National Conference of State Legislatures (NCSL, 2020) on the make-up of state legislatures and the governor's office from 2010 through 2020. This was used to create a table showing which party had control of the governorship and which party had control of the legislature, or if there was a split (meaning the legislature was split between parties), for each year and for each state. Next, these results were combined to determine when a party had full control of a state's government for each year. If there was a split – meaning no single party controlled both chambers of the legislature and the governor's office – this was indicated that as well. From here, it was determined if one party controlled the whole government of each state the majority (>50 percent) of the years (2010-2020) or if there was a split the majority of the time. Next, a bivariate analysis was performed where party control of the state is the independent variable and plastic bag policy (either a plastic bag ban or preemption) is the dependent variable. What percentage of plastic bag bans occur in primarily Republican controlled states and what percentage of plastic bag bans occur in primarily Democrat controlled states was then calculated. Also calculated was what percentage of preemption laws occur in Republican states and what percentage of preemption laws occur in Democratic states. This is used to analyze Hypotheses 1 and 2.

This report also examines interparty competition by looking at the Ranney competition index (Gray et al., 2018; Flavin and Shufeldt, 2016; Holbrook and Van Dunk, 1993), with the intention of illustrating whether increased party competition has an impact on plastic bag policy. The Ranney party control index is a calculation that measures control of government, with 0 indicating full Republican control and 1 indicating full Democrat control. It averages several components, including proportion of success, duration of success, and frequency of divided control. When the score is 0.5 – the mid-point – control is evenly split between parties. This would mean that there is a highly competitive environment.

The Ranney competition index, which is being used in this research paper, is calculated as one minus the absolute value (i.e. the positive value) of one half minus Ranney, with Ranney being the calculated value mentioned above.

$$\text{Ranney Competition Index} = \left| 0.5 - \text{Ranney} \right|$$

The Ranney competition index measures how close the competition in a given state is to “perfect.” This ranges from 0.5 to 1.0 (from no competition up to perfect competition) (Gray et al., 2018). The values used in this paper are taken from the book *Politics in the American States: A Comparative Analysis* (Gray et al., 2018). In this publication, the authors calculate the Ranney competition index for the period of 2012-2017 (with a single number calculated for each state over this period of time). It is being used here as the index score coincides with or immediately proceeds most of the time periods that plastic bag policies were enacted (Figure 2 shows dates policies were passed by the state governments).

To determine if there is a relationship between competition in a state and plastic bag policies, a simple logit model was used where there being a plastic bag policy (either a ban or

preemption) is the dependent variable and where the Ranney competition index value is the independent variable. This is done to see if there is an empirical relationship between a policy on plastic bags and competition. This is used to examine Hypothesis 3.

Finally, there is a discussion on the financial contributions from the three plastics industry organizations that have ties to the plastic bag industry specifically, including the American Chemistry Council (ACC), the Plastics Industry Association (PIA), and the American Recycled Plastic Bag Alliance (APBA) (formerly the American Progressive Bag Alliance. Data at the federal level is compiled from the Center for Responsive Politics, which receives its data directly from the Senate Office of Public Records and Federal Election Commission (Center for Responsive Politics A, B, C, D). For the state level analysis, California is used as an example due to the robust amount of available data in the state. These data are taken directly from the California Secretary of State's website (CA SOS). Once all the contributions are compiled, which party received more funding from the ACC or SPI was determined by performing a bivariate analysis, where the candidate's party affiliation is the independent variable and the amount of funds given to them, on a scale of zero to infinity, is the dependent variable.

Results

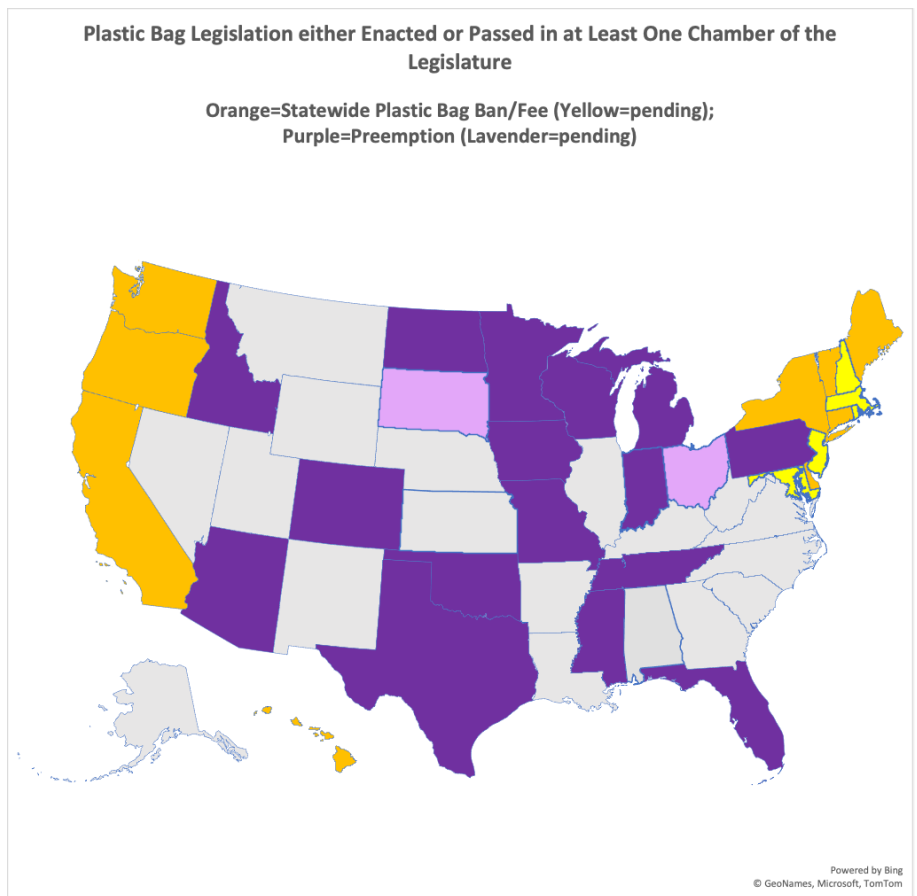
In presenting the results of the research, this paper begins by looking at the plastic bag policies across the United States. Following this, the partisanship of the states that have plastic bag policies and the interparty competition within each state is examined. Finally, the presumed influence attempted by the plastics industry in terms of lobbying and campaign contributions is studied.

STATEWIDE PLASTIC BAG POLICIES

Figure 1 presents a map that is color coded by state as follows: 1) grey indicates there is no existing statewide plastic bag legislation; 2) orange/yellow indicates there is a fully enacted plastic bag ban in that state (orange) OR that there is one pending that has passed at least one chamber of the legislature (yellow); and 3) purple/lavender indicates there is statewide preemption (purple) OR it has passed at least one chamber of the legislature (lavender).

Only two states, Ohio and South Dakota, have preemption that is not fully enacted. In Ohio, it has been passed on a temporary basis for one year, and the permanent version of the law is pending. All other states coded in purple have preemption laws that have been fully enacted. In terms of plastic bag bans, five states – including Maryland, Massachusetts, New Hampshire, New Jersey, and Rhode Island – have plastic bag bans that are pending (passed in at least one chamber). The rest of the states presented in yellow have fully enacted statewide plastic bag bans.

Figure 1: Statewide Plastic Bag Policies



PARTISANSHIP IN STATES WITH PASTIC BAG POLICIES (Hypothesis 1 & 2)

Hypotheses 1 and 2 are repeated here followed by a discussion on the findings of the analysis.

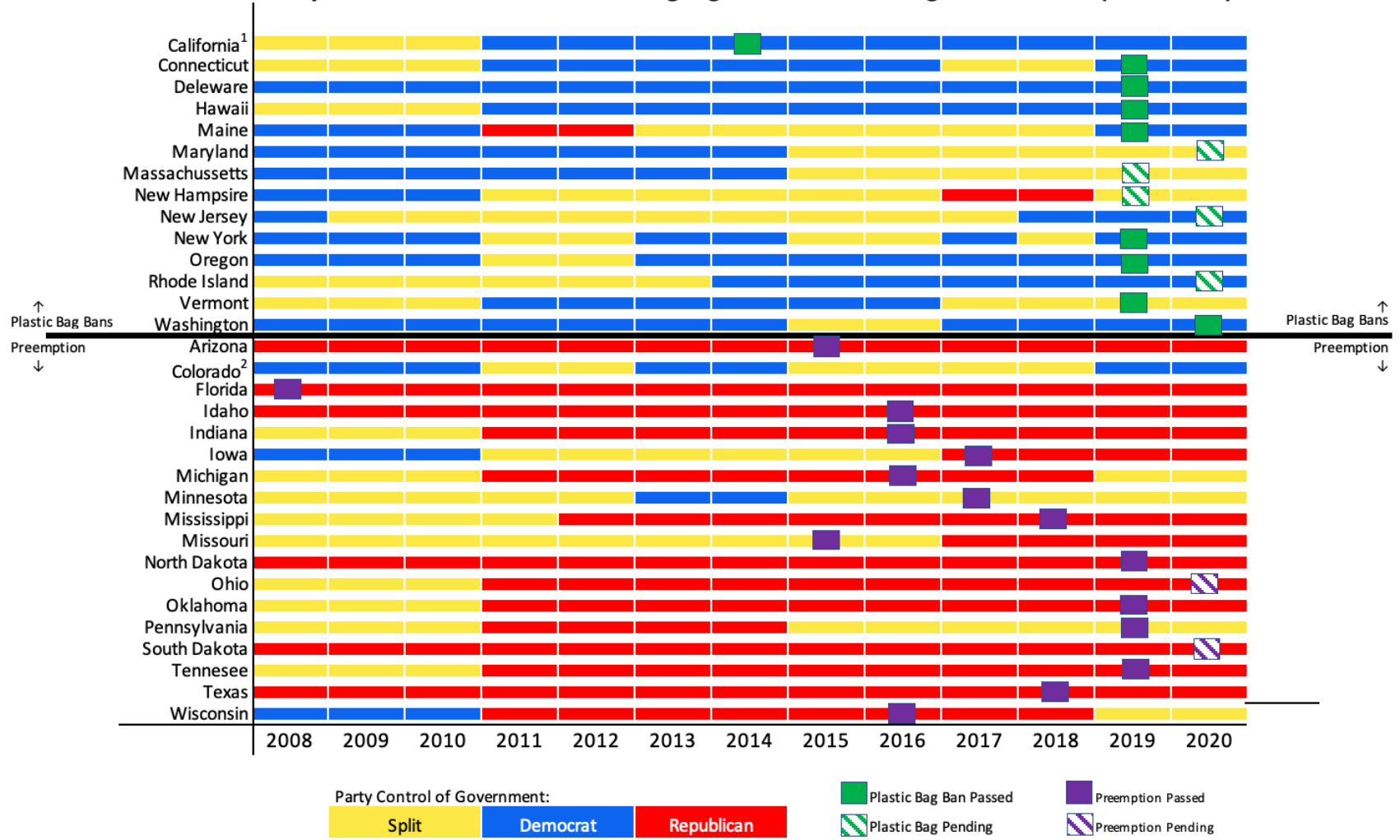
H1: On average, plastic bag bans will occur less in historically Republican states than in historically Democratic states.

H2: On average, preemption prohibiting plastic bag bans will occur less in historically Democrat states than in historically Republican states.

First, the partisanship of each state is looked at to identify what the political makeup was at the time plastic bag legislation was passed. Figure 2 presents a timeline for each year from 2008 to 2020 for each state and indicates: 1) whether the state was Republican controlled, Democrat controlled, or if the government was split; and 2) what year the legislation was fully enacted or when pending legislation was last passed in one chamber of the state assembly. These years were selected as all of the plastic bag legislation – both bag bans and preemption – were passed (or pending) during this time period. The exception here is Colorado which passed its legislation in 1993, when there was a split government.

Figure 2 shows that eight of the nine states with an enacted plastic bag ban accomplished it when Democrats had full control of the state government. One state, Vermont, had a split government. The four states with pending legislation are in states with either full Democrat control or a split government. For states with preemption, 12 of the 16 states that have enacted preemption laws passed them when Republicans had full control of state government. Four of the states with enacted preemption passed the laws when there was a split government. The two states with pending preemption had full Republican control. These findings support Hypotheses 1 and Hypothesis 2.

Figure 2
Party Control of States with Plastic Bag Legislation and Year Legislation Passed (2008-2020)



Notes: 1- The California bag ban was signed by legislators in 2014 but not enacted until the general population voted in 2016. 2- Colorado preemption passed in 1993 and is not shown on this chart. There was a split government at the time.
 Source: National Council of State Legislatures, 2020

Next, an analysis of the long-term partisanship of the state is performed since it can take time to get a law passed. For example, in California it was over a ten-year period of time that the state went from just requiring recycling containers to be provided in stores to passing a statewide plastic bag ban and getting it approved by voters. Thus, looking at the trends of state political control over a longer period of time is relevant. The long-term partisanship trend in a state indicates more of what the sustained ideology of the voters tends to be. Tables 1 and 2 show the plastic bag legislation beside the historical party of the state from 2008-2020 for states with plastic bag bans (Table 1) and states with preemption (Table 2).

Column 2 of Tables 1 and 2 shows which party had control of the government and for what percent of the years (shown in parentheses). As displayed in Table 2, 71 percent of states that have plastic bag bans were Democrat controlled for the majority of the time over the 12-year period, while the other 29 percent of states had split governments for the majority of years. Likewise, as shown in Table 2, in states with preemption, 72 percent of states were Republican led over the 12-year period while 28 percent were split for the majority of years.

Columns 3 and 4 of Tables 1 and 2 look at states that had split governments the majority of the time. This is done to see what the breakdown would be if a majority party were assigned (i.e. which party came in on top if we ignore the split years). As shown, when taking this into account, Democrats are in control of government 100 percent of the time in states where there is a statewide plastic bag ban in effect or pending (Table 1). Likewise, Republicans are in control of government 89 percent of the time in states where there is preemption enacted or pending (Table 2).

These results support Hypotheses 1 and 2.

Table 1			
Party Control of States with Plastic Bag Bans (enacted or passed in at least one chamber) from 2008-2020			
Column 1 STATE	Column 2 Majority Party Control <i>From 2010-2020 when >50% of Years had Democrat control, Republican control, or Split control of gov (% indicated in parentheses)¹</i>	Column 3 Breakdown of Party Control if Majority of Years had Split Gov <i>What party controlled more years when there was no split?</i>	Column 4 Assigned Party Control <i>Overall Results When Assigning Most Common Party to Those with Majority Split Government</i>
California	DEMOCRAT (77% of yrs)		DEMOCRAT
Connecticut	DEMOCRAT (62% of yrs)		DEMOCRAT
Delaware	DEMOCRAT (100% of yrs)		DEMOCRAT
Hawaii	DEMOCRAT (77% of yrs)		DEMOCRAT
Maine	NONE (NONE OVER 50%)	Split=46%; Democrat=38%; Republican=15%	DEMOCRAT
Maryland	DEMOCRAT (54% of yrs)		DEMOCRAT
Massachusetts	DEMOCRAT (54% of yrs)		DEMOCRAT
New Hampshire	SPLIT (62% of yrs)	Democrat=23%; Republican=15%	DEMOCRAT
New Jersey	SPLIT (69% of yrs)	Democrat=31%	DEMOCRAT
New York	DEMOCRAT (62% of yrs)		DEMOCRAT
Oregon	DEMOCRAT (85% of yrs)		DEMOCRAT
Rhode Island	DEMOCRAT (54% of yrs)		DEMOCRAT
Vermont	SPLIT (54% of yrs)	Democrat=46%	DEMOCRAT
Washington	DEMOCRAT (85% of yrs)		DEMOCRAT
TOTALS: 71% of states with plastic bag bans are Democrat controlled for the majority of years (omitting those where control was split for the majority of years)		100% of states with plastic bag bans are Democrat controlled for the majority of years (when assigning party to split states)	
Notes: 1- Options for party control are Democrat, Republican or Split. The number in parenthesis is what percent of the time the indicated party (or split) occurred. As an example, for California, the number in parenthesis is 77%. This means 77% of the years from 2008-2020 California had full Democrat control of state government. The other 23% would either be Republican or Split (in this case, it was split, see Figure 2).			
Source: National Conference of State Legislatures, 2020			

Table 2			
Party Control of States with Preemption (enacted or passed in at least one chamber) from 2008-2020			
Column 1 STATE	Column 2 Majority Party Control <i>From 2010-2020 when >50% of Years had Democrat control, Republican control, or Split control of gov (% indicated in parentheses)¹</i>	Column 3 Breakdown of Party Control if Majority of Years had Split Gov <i>What party controlled more years when there was no split?</i>	Column 4 Assigned Party Control <i>Overall Results When Assigning Most Common Party to Those with Majority Split Government</i>
Arizona	REPUBLICAN (100%)		REPUBLICAN
Colorado	DEMOCRAT (54% of yrs)		DEMOCRAT
Florida	REPUBLICAN (100%)		REPUBLICAN
Idaho	REPUBLICAN (100%)		REPUBLICAN
Indiana	REPUBLICAN (77%)		REPUBLICAN
Iowa	NONE (NONE OVER 50%)	Democrat=9%; Republican=31%.	REPUBLICAN
Michigan	REPUBLICAN (62%)		REPUBLICAN

Column 1 STATE	Column 2 Majority Party Control <i>From 2010-2020 when >50% of Years had Democrat control, Republican control, or Split control of gov (% indicated in parentheses)¹</i>	Column 3 Breakdown of Party Control if Majority of Years had Split Gov <i>What party controlled more years when there was no split?</i>	Column 4 Assigned Party Control <i>Overall Results When Assigning Most Common Party to Those with Majority Split Government</i>
Minnesota	SPLIT (85%)	Democrat=15%.	DEMOCRAT
Mississippi	REPUBLICAN (69%)		REPUBLICAN
Missouri	SPLIT (69%)	Republican=31%.	REPUBLICAN
North Dakota	REPUBLICAN (100%)		REPUBLICAN
Ohio	REPUBLICAN (77%)		REPUBLICAN
Oklahoma	REPUBLICAN (77%)		REPUBLICAN
Pennsylvania	SPLIT (69%)	Republican=31%.	REPUBLICAN
South Dakota	REPUBLICAN (100%)		REPUBLICAN
Tennessee	REPUBLICAN (77%)		REPUBLICAN
Texas	REPUBLICAN (100%)		REPUBLICAN
Wisconsin	REPUBLICAN (62%)		REPUBLICAN
NOTES: 72% of states with preemption are republican controlled for the majority of years (omitting those where control was split for the majority of years)		89% of states with preemption are republican controlled for the majority of years (when assigning party to split states)	
Notes: 1-Options for party control are Democrat, Republican or Split. The number in parenthesis is what percent of the time the indicated party (or split) occurred. As an example, for Indiana, the number in parenthesis is 77%. This means 77% of the years from 2008-2020 Indiana had full Republican control of state government. The other 23% would either be Democrat or Split (in this case, it was split, see Figure 2). 2-Colorado has preemption due to a decades old law related to recycling that did not have the original intention of preempting plastic bag bans. The party control of the state often being Democrat and the existence of preemption laws is perhaps misleading for this reason. Source: National Conference of State Legislatures, 2020.			

The above analysis, as presented in Tables 1 and 2 and Figure 2, illustrates that both Hypothesis 1 and Hypothesis 2 are correct. There is a significant partisan aspect to plastic bag policies.

INTERPARTY COMPETITION (Hypothesis 3)

This section examines the connection between the level of interparty competition within a state and the likelihood of that state having a plastic bag policy.

Hypothesis 3

The third hypothesis is repeated here followed by a discussion on the findings.

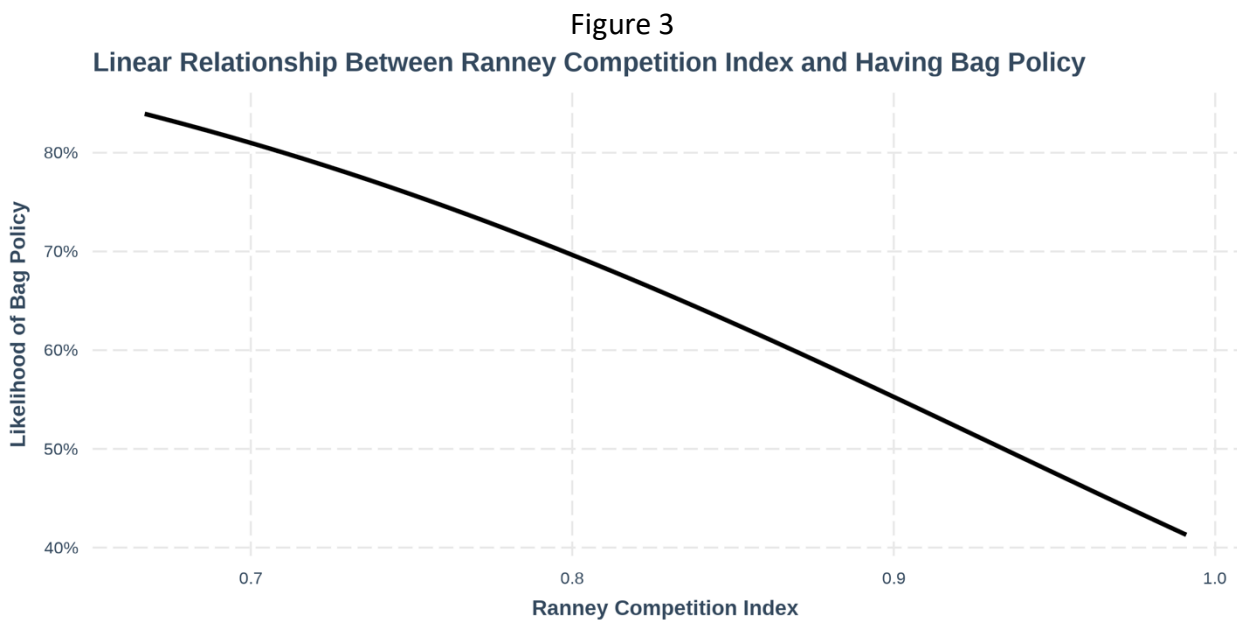
H3: On average, statewide plastic bag policies (either preemption or bag bans/fees) will occur more in states with a lower Ranney competition index.

Table 3 presents the Ranney competition index (Gray et al., 2018) coupled with plastic bag policies. This analysis looks to see if a policy occurs more when there is more competition in the state, irrespective of whether the policy is a plastic bag ban or preemption. Table 3 lists all states in order of lowest to highest Ranney competition index and is color coded to indicate what the policy is in the state. The Ranney competition index ranges from 0.5 to 1.0, where a lower value indicates less competition, and a higher value indicates more competition.

Table 3 Ranney Competition Index Compared to Plastic Bag Legislation by State (WHITE = no legislation, ORANGE/YELLOW=Plastic Bag Ban Enacted (orange) OR Passed in At Least One Chamber of the Legislature (yellow), PURPLE=Preemption Enacted (purple) OR Passed in At Least One Chamber of the Legislature (lavender))			
State	Ranney Competition Index	State	Ranney Competition Index
Hawaii	0.667	New York	0.83
Wyoming	0.679	Michigan	0.836
South Dakota	0.702	Arizona	0.839
Utah	0.715	North Carolina	0.84
Tennessee	0.727	Alaska	0.848
North Dakota	0.728	Arkansas	0.851
Idaho	0.731	Illinois	0.854
Rhode Island	0.743	Wisconsin	0.863
California	0.749	Missouri	0.868
Oklahoma	0.764	Colorado	0.878
Massachusetts	0.765	Washington	0.891
Delaware	0.766	Nebraska	0.893
Kansas	0.771	Louisiana	0.899
Alabama	0.777	Minnesota	0.912
Ohio	0.782	New Jersey	0.913
Indiana	0.785	Iowa	0.913
Vermont	0.8	Pennsylvania	0.924
Georgia	0.809	Montana	0.937
Connecticut	0.809	Virginia	0.958
Mississippi	0.817	Nevada	0.961
Oregon	0.818	New Mexico	0.963
Maryland	0.821	West Virginia	0.963
South Carolina	0.824	Kentucky	0.968
Florida	0.825	New Hampshire	0.981
Texas	0.827	Maine	0.991

Table 3 Ranney Competition Index Compared to Plastic Bag Legislation by State (WHITE = no legislation, ORANGE/YELLOW=Plastic Bag Ban Enacted (orange) OR Passed in At Least One Chamber of the Legislature (yellow), PURPLE=Preemption Enacted (purple) OR Passed in At Least One Chamber of the Legislature (lavender)			
State	Ranney Competition Index	State	Ranney Competition Index
SOURCE: Gray, V. et al. 2018. Politics in the American States: A Comparative Analysis. Thousand Oaks, CA: CQ Press.			

The values from Table 3 were input into R where a simple logistic regression model was created with whether or not there is a bag policy as the dependent variable and the Ranney competition index as the independent variable. A graph of the results was created and is presented in Figure 3. There appears to be a clear negative relationship between bag policy and competition in the state. In states with lower competition, the likelihood of the state having a plastic bag policy is over 80 percent. However, in higher competition environments, this value is cut nearly in half to the low 40 percent range.



ADDITIONAL FINDINGS

Financial Influence of Plastic Bag Industry

While the previous discussion centers around existing law and partisanship, this discussion will focus on the efforts by the plastics industry to influence policy. This section looks at both financial contributions, as well as a brief discussion on other areas where the industry is exerting its influence in ways that are not directly financial but could ultimately have a positive financial impact on the plastics industry.

Campaign reporting requirements result in a robust set of available data on federal campaign contributions and lobbying efforts. The primary sources of funding that is examined come from three organizations that represent the plastics industry, including the ACC, PIA, and APBA. These organizations participate in efforts to protect plastics, including plastic bag use, through lobbying and funding of candidates. They are interconnected to one another as well. The ACC used to house the APBA until 2012 when it moved over the PIA in an effort to increase their resources to “defend plastic bags and promote the recycling of all plastic film” (ACC, 2011(2)). ACC and SPI contributed to lobbying on the federal level and gave direct contributions to federal candidates. The ACC has also actively worked to stop plastic bag bans in California (ACC, 2010 and ACC, 2011). As such, all three are involved in advocating against plastic bag bans and arguing for preemption.

Lobbying: As shown in Table 4, the total federal lobbying amount from the ACC from 1998-2019 is approximately \$141.5 million. For the same period of time, the SPI donated approximately \$6.5 million.

Year	ACC	SPI
1998	\$4,998,760	\$704,000
1999	\$5,390,000	\$708,000
2000	\$4,320,000	\$708,000
2001	\$3,340,000	\$708,000
2002	\$2,240,000	\$0
2003	\$2,230,000	\$380,000
2004	\$5,360,000	\$100,000
2005	\$2,820,000	\$35,000
2006	\$2,886,938	\$160,000
2007	\$2,390,000	\$130,000
2008	\$3,940,000	\$242,000
2009	\$7,020,000	\$195,000
2010	\$8,130,000	\$180,000
2011	\$10,280,000	\$290,000
2012	\$9,070,000	\$260,000
2013	\$12,250,000	\$335,000
2014	\$11,364,703	\$360,000
2015	\$10,050,000	\$200,000
2016	\$9,020,000	\$210,000
2017	\$7,440,000	\$240,000
2018	\$9,280,000	\$240,000
2019	\$7,630,000	\$210,000
TOTAL	\$141,450,401	\$6,595,000
PORTION ALLOTTED TO SUBSIDIARIES		
ACC	ACC N American Flame Retardant Alliance	\$40,000
ACC	Chlorine Chemistry Council	\$1,210,000
SPI	Styrene Information & Research Center	\$340,000

SOURCE: 1: Center for Responsive Politics. ND. American Chemistry Council (Lobbying Profile). <https://www.opensecrets.org/federal-lobbying/clients/summary?id=D000000365&cycle=2019>

2: Center for Responsive Politics. ND. Plastic Industry Association (Lobbying Profile). <https://www.opensecrets.org/federal-lobbying/clients/summary?cycle=2019&id=D000029104>

Contributions to candidates: As presented in Table 5, from 2008 to 2018 the ACC donated over \$3 million to federal candidates and the SPI donated just over \$178,000. This is

broken down by party. The percentage given to Republicans far exceeds the amount given to Democrats from both the ACC (with 69 percent given to Republicans, 30 percent to Democrats) and the SPI (with 88 percent given to Republicans, and 12 percent given to Democrats).

These contributions were likely made to further the interests of the plastics industry beyond plastic bag legislation and is not specific to state level politics. However, as this is a sizable amount of funding, it illustrates the industry’s ability to exert significant influence.

YEAR	ACC			SPI		
	AMOUNT	% REPUBLICAN	% DEMOCRAT	AMOUNT	% REPUBLICAN	% DEMOCRAT
1998	\$125,199	77%	23%	\$9,500	89%	11%
2000	\$111,150	78%	22%	\$0	NA	NA
2002	\$202,581	78%	22%	\$1,000	100%	0%
2004	\$118,396	75%	25%	\$0	NA	NA
2006	\$166,500	78%	18%	\$0	NA	NA
2008	\$286,929	45%	55%	\$9,500	89%	11%
2010	\$304,057	43%	56%	\$15,700	87%	13%
2012	\$330,000	72%	28%	\$35,500	93%	7%
2014	\$418,500	74%	24%	\$29,000	69%	31%
2016	\$403,000	74%	26%	\$22,500	87%	13%
2018	\$549,000	64%	36%	\$55,750	90%	10%
TOTAL	\$3,015,312	69%	30%	\$178,450	88%	12%

SOURCE: 1: Center for Responsive Politics. ND. American Chemistry Council (Summary of Federal Candidate Funding). <https://www.opensecrets.org/pacs/lookup2.php?strID=C00252338>
 2: Center for Responsive Politics. ND. Plastic Industry Association (Summary of Federal Candidate Funding). <https://www.opensecrets.org/pacs/lookup2.php?cycle=2018&strID=C00309716>

State level: Data on campaign contributions and lobbying efforts at the state level are not readily available for most states. Data is available for California and it is presented here as an example. There are many reasons why California is an interesting state to look at in terms of plastics industry funding. However, these reasons also support the argument for why the state is not typical or representative of what other states may experience and therefore data on California

should not be extrapolated to other states. These factors include the long, multi-year and highly contested effort to get the plastic bag ban enacted statewide there, the number of plastic bag companies located within the state, the high buying power of California's large population, and the proximity to Silicone Valley.

Contributions in California were made directly to the plastics bag ballot measures that resulted in plastic bags being banned. California allowed voters to decide if plastic bags should be banned through two ballot measures, 65 and 67. Proposition 65 was supported by the ARPBA (then called the APBA), which if approved would have enacted a fee for plastic bags that would have gone to the Wildlife Conservation Fund. If Proposition 65 got more votes than Proposition 67, it would have been enacted. Proposition 67, if approved, would have prohibited plastic bags in the state. However, if Proposition 67 received more votes, it would be enacted. Therefore, by supporting Proposition 65 and opposing Proposition 67, the ARPBA was looking at the scenario that would have kept plastic bags in the state while giving their support an environmental spin (i.e. donating to the Wildlife Conservation Fund). In November of 2016, Proposition 67 received the most votes and was enacted, banning plastic bags statewide (Ballotpedia).

Table 6 shows the total amount the ARPBA spent in lobbying, which comes to over \$6 million. Table 6 also shows the companies that contributed to the organization, and as shown, most of them are chemical or plastics companies located in California (plastic bag ban), Texas (preemption), New Jersey (plastic bag ban), South Carolina (no legislation) and Mississippi (plastic bag ban). Table 6 also shows that while there are several companies within the state of California, several of the largest contributors were from out of state. This indicates that what happens in any one state may have an impact throughout the industry.

COMPANY	STATE	AMOUNT (2013-2016)
Advance Polybag, Inc.	TX	\$946,833
Crown Poly, Inc.	CA	\$12,000
Durabag Co., Inc.	CA	\$50,000
Elkay Plastics Co., Inc.	CA	\$4,000
Formosa Plastics Corporation U.S.A.	NJ	\$1,148,442
Helix Poly Co. LLC	SC	\$2,783,739
Heritage Plastics Inc.	MS	\$50,000
Metro Poly Co.	CA	\$2,500
Omega Extruding Corp.	CA	\$1,000
Prince Rubber and Plastics Co. Inc.	TX	\$25,000
Restore California - Jim Frazier Ballot Measure Committee	CA	\$2,000
Sid Marantz & Associates	CA	\$1,500
Superbag Corp.	TX	\$1,109,370
The Dow Chemical Company	TX	\$10,000
	TOTAL	\$6,146,383

SOURCE: California Secretary of State. ND. Cal Access. <http://cal-access.sos.ca.gov/Campaign/Committees/Detail.aspx?id=1372902&session=2017>.

NOTE: ARPBA was called APBA at the time, and they supported Yes on 65 and no on 67 (referendum against SB 270).

The next set of data examined is the contributions from the ACC, SPI, and Plastics California (PC) to candidates in California running for state senate, state assembly, lieutenant governor, or governor. As can be seen in Table 7, the combined amount from the ACC and SPI is \$662,407. However, what is surprising here is that 65 percent of that amount was given to Democrats and 35 percent to Republicans. This is the opposite of what was seen in federal contributions. (See the summary section below Table 7 for a discussion on this.) It is also of interest to note that the funding from the SPI and PC was largely replaced by funding from the ACC, further suggesting the possibility that the two agencies work with one another.

Year	ACC				SPI and PC			
	Republican		Democrat		Republican		Democrat	
	Count	Amount	Count	Amount	Count	Amount	Count	Amount
2001					17	\$15,950	15	\$15,000
2003					24	\$40,000	10	\$10,000
2005					15	\$19,590	10	\$19,000
2007	6	\$9,100	9	\$13,500	1	\$1,000	8	\$8,702
2009	7	\$10,000	23	\$33,500	1	\$1,000	0	\$0
2011	26	\$32,900	52	\$73,500	4	\$4,950	7	\$9,500
2013	17	\$24,000	64	\$91,015				
2015	24	\$29,500	39	\$59,200				
2017	24	\$35,000	45	\$61,500				
2019	9	\$7,000	28	\$38,000				
TOTAL	113	\$147,500	260	\$370,215	62	\$82,490	50	\$62,202
%	30%	28%	70%	72%	55%	57%	45%	43%

SOURCE: California Secretary of State. ND. <http://powersearch.sos.ca.gov/advanced.php>

NOTE: There were cases where multiple contributions were given to a single individual, however as they were on different dates and were recorded separately, they are considered separate contributions.

Data includes contributions to California candidates for state senate, state assembly, governor, lieutenant governor, and partisan groups that support candidates. This includes contributions from the American Chemistry Council (ACC), the Plastics Industry Association (PIA) and Plastics California a PAC of the Plastics Industry (PA). PIA and PC are combined.

Summary of Financial Contributions

A large sum of money – in the range of \$150 million – has been spent on lobbying and campaign contributions by plastics industry organizations at the federal level and in California. This does not account for money spent at the state level in other states. This suggests the industry has a great deal at stake when it comes to the regulation of plastics. Interestingly, while the contributions to federal candidates did follow the partisan leanings of plastic bag policies, where more funds were given to Republican candidates than Democratic candidates, in California the opposite was true. This could be explained by the findings of a study previously discussed on interest group spending which found that oftentimes, interest groups will contribute to the candidate most likely to win the election (Grossman and Helpman, 1996). While the analysis has not been done to see if the candidates the plastics industry contributed to actually won those

elections, as California is a historically Democratic state, it is certainly plausible that this way of thinking explains this pattern of campaign contributions in California. A comprehensive study examining contributions to all fifty states would be a useful future study that could provide interesting data from which to draw additional conclusions on this topic.

Other Influence of Plastics Industry

Influence by the plastics industry can occur in unexpected ways in addition to funding. In California, the ACC lobbied California school officials and put pressure on them to include positive messaging on plastic shopping bags in the newly adopted environmental curriculum (Rust, 2011). A section titled “The Advantages of Plastic Shopping Bags” was in the eleventh-grade teacher’s edition, where the title and some of the language in the textbook were taken nearly verbatim from the ACC. The ability of a private industry lobbyist with financial gains attached to this messaging to penetrate the curriculum of K-12 children in public schools illustrates the far-reaching and concerning influence this industry has.

Another topic of concern is the area of model bills, written by corporations and put into state law. The American Legislative Exchange Council (ALECP) is an organization made up of state legislators and other stakeholders, funded largely by corporations and powerful players such as the Koch Brothers (ALEC; Sourcewatch; O’Dell and Pensenstadler, 2019). This group creates model bills that are written by special interests who push forth the agenda of those who write them. This includes plastic bag preemption bills (O’Dell and Pensenstadler, 2019). An example is the case in Ohio, where the bill for preemption closely resembles the bill developed by ALEC (Borchardt, 2019). The key concern with these model bills and how they are being used is that the special interest groups and corporations creating them do not have a direct lobbying connection to the proposed bill because the bill was not funded specific to that state, so

there is no money trail. Nevertheless, “these copycat bills amount to the nation’s largest, unreported special interest campaign, driving agendas in every statehouse and touching nearly every area of public policy” (O’Dell and Pensensadler, 2019). The ways these special interest groups are able to get their issues addressed legislatively is something that should be studied and understood further in how it relates to plastics industry legislation.

Conclusion and Future Research

This study provides interesting findings. First, there is a very strong relationship between the party control of a state and what kind of plastic bag legislation that state is inclined to pass. All statewide plastic bag bans that have been enacted occurred in states that never had a Republican controlled government over the study period of 2010-2020. Only one state with pending legislation had two years of Republican control. Otherwise, all other states in all other years had Democrat control or a split government. Likewise, only Minnesota and Colorado are states that have preemption and ever had a Democrat controlled government in the years studied. Minnesota had Democrat control for two years, and Colorado has preemption based on a law from the 1990s that was enacted for other reasons but effectively resulted in preemption.

This analysis indicates that plastic bag policies follow the same partisan pattern as other environmental topics such as climate change. It presents a continued pattern of behavior whereby Republicans enact policy that opposes environmental concerns, regardless of if those concerns are scientifically proven to have a negative impact on the planet, as is the case with plastics.

Another interesting finding is that there is a link between competition in a state and policy enactment. This suggests that when attempting to progress a certain policy, one would be wise to look at states with less competition, provided the policy was aligned with the ideology of the state. In the future, it would be interesting to discover more about how ideology aligns with

plastic bag policy through an expansive, state to state study. In many states, especially those with preemption, there were plastic bag bans that were enacted or pending on a city- or county-wide basis that were made invalid by preemption. Since these are located in Republican controlled states, it would be interesting to compare the ideology of those cities, as well as the ideology of the states to determine if there is a link between ideology and plastic bag legislation. Also, it would be interesting to see if actual plastic bag use varies by state. By looking at states without plastic bag legislation, it would be informative to know if the per capita use is higher in Democrat or Republican states to see if there is any evidence that people are self-regulating based on their political ideals.

Since this is a topic that is in its infancy, it is one that merits continued research. Plastic bag policies appear to be a gateway into other plastics being regulated, as seen in cities such as Seattle (Wu, 2018). As our world runs out of ways to manage the never-ending stream of plastic waste, we are going to have to address it whether we like it or not and whether there is pushback from the plastics industry. As this waste stream persists and alternatives are explored, we must understand how the special interests of a few can interfere and impact the public as a whole. Continued research should investigate the financial and other influences the plastics industry has on legislation. Additional research should include issues of environmental justice, where we examine the unbalanced impact on developing countries, as well as communities within the United States located near overflowing landfills and polluted waterways. Understanding how and where plastic related policies are being developed, and what their human, environmental, and economic impacts are, will be critical to creating a sustainable future for everyone. This would also include finding a way to transition away from our reliance on plastics in a manner that

would help those in the plastics industry transition to new more sustainable fields and mediate the negative economic impact on society.

An interesting point regarding the economy is the situation in California. While the state has a statewide plastic bag ban in effect, they also house many plastics manufacturers. In fact, California has the most plastics industry employees in the country at approximately 78,500 (Goldsberry, 2019). It would be interesting to examine why a state with progressive plastics policies would attract or retain this business. Perhaps there are other financial incentives that are not specific to the environment, such as tax concerns, access to production resources, or proximity to Silicon Valley, that attract these companies. On the other hand, perhaps there is a benefit in having a presence in the state from a political standpoint. If the plastics industry can claim that regulations against the use of plastic will impact 78,500 employees within California, they make a more compelling argument against statewide bans. If they left the state, they would lose this argument. Since a state like California – which has a huge economy – is often a leader in progressive environmental policy, it is a state where perhaps the plastics industry can justify waging a costly battle. This is a topic that may warrant further investigation.

Finally, the impact of COVID-19 on the regulation of and use of plastic bags should be examined. At the writing of this paper, the country is still in the midst of the pandemic and how it will change future regulation has yet to be seen. Some states such as in California and Connecticut lifted their plastic bag bans for a time but have now reimposed restrictions (Martichoux, 2020; Fawcett, 2020). Conversely, in Ohio, the one state that has preemption pending but not yet enacted, it is said that the governor will be passing the statewide preemption on plastic bag bans and has indicated the pandemic is the reason he will be ignoring requests to veto the bill (Kovac and Ludlow, 2020). In Maryland, where a plastic bag ban was pending, the

governor lifted restrictions due to COVID-19 and prohibited reusable bag use (Kurtz, 2020). These and other possible changes due to the spread of disease should be studied closely. It is of the utmost importance that the efforts made to reduce plastic waste are not undermined. As new data on how long the virus can live on surfaces is determined, as vaccines and other treatments become available, and as people become more comfortable with the concept of washing reusable bags, it is imperative that we not lose site of the real and significant risks plastic waste poses to humans and the environment. Allowing the plastics industry to capitalize on fears would be a detriment to us all, and we should be wary of the use of television and other online or print advertisements that use emotional appeals to sway public opinion and influence politics (Brader, 2005; Weber, 2012; Abramowitz and Webster 2018). Likewise, we should be wary of industry messaging in educational materials, like that which the ACC advocated for in California.

The plastics problem is not going to go away anytime soon. Understanding the dynamics behind its use and regulation is an important step toward solving this global problem.

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SOURCE OF STATE LAWS:

AK	http://www.akleg.gov/basis/Bill/Detail/30?Root=HB%20264
AL	https://legiscan.com/AL/bill/HB346/2019
AR	https://www.arkleg.state.ar.us/Bills/Detail?id=HB1036&ddBienniumSession=2013%2F2013R
AZ	https://azleague.org/297/SB-1241
CA	https://leginfo.legislature.ca.gov/faces/billStatusClient.xhtml?bill_id=201320140SB270
CO	http://leg.colorado.gov/bills/SB20-010
CT	https://portal.ct.gov/DRS/Legislative-Summaries/2019-Legislative-Updates/Single-Use-Plastic-Bag-Fee
DC	https://doee.dc.gov/page/bag-law-faqs
DE	https://news.delaware.gov/2019/07/29/governor-carney-signs-legislation-to-ban-plastic-bags-reduce-litter-in-delaware/
FL	https://floridadep.gov/waste/waste-reduction/content/retail-bags-report
GA	https://legislativenavigator.ajc.com/#bills/SB/280
HI	https://www.capitol.hawaii.gov/session2019/bills/SB522_.HTM
IA	https://www.desmoinesregister.com/story/news/investigations/readers-watchdog/2017/04/10/alec-plastic-bag-ban-iowa/100189578/
ID	https://legislature.idaho.gov/sessioninfo/2016/legislation/h0372/

IL	http://www.ilga.gov/legislation/BillStatus.asp?DocTypeID=HB&DocNum=3335&GAID=15&SessionID=108&LegID=119837
IN	http://iga.in.gov/legislative/2016/bills/house/1053#digest-heading
KS	http://kslegislature.org/li/b2019_20/measures/hb2625/
KY	https://apps.legislature.ky.gov/record/20rs/prefiled/BR999.html
LA	NA
MA	https://malegislature.gov/Bills/191/S2422
MD	http://mgaleg.maryland.gov/mgaweb/legislation/details/hb0209?ys=2020RS
ME	https://legislature.maine.gov/legis/bills/bills_128th/billtexts/HP004401.asp
MI	http://www.legislature.mi.gov/(S(p05wavfhh0r511w0z2w14lk))/mileg.aspx?page=getObject&objectName=2019-HB-4500
MN	https://www.house.leg.state.mn.us/bills/Info/HF511/91/2019/0
MO	https://house.mo.gov/billtracking/bills151/hlrbillspdf/1745S.04T.pdf
MS	http://billstatus.ls.state.ms.us/documents/2018/html/SB/2500-2599/SB2570PS.htm
MT	http://laws.leg.mt.gov/legprd/LAW0210W\$BSIV.ActionQuery?P_BILL_NO1=121&P_BLTP_BILL_TYP_CD=SB&Z_ACTION=Find&P_SESS=20191
NC	https://www.ncleg.net/Sessions/2017/Bills/House/PDF/H56v7.pdf
ND	https://www.legis.nd.gov/assembly/66-2019/bill-actions/ba1200.html
NE	Fee: https://nebraskalegislature.gov/bills/view_bill.php?DocumentID=41067 ; preemption: https://nebraskalegislature.gov/bills/view_bill.php?DocumentID=40869
NH	http://gencourt.state.nh.us/bill_status/bill_status.aspx?lsr=463&sy=2020&sortoption=&txtsessionyear=2020&txtbillnumber=HB559
NJ	https://www.njleg.state.nj.us/bills/BillView.asp?BillNumber=S864
NM	NA
NV	https://www.leg.state.nv.us/App/NELIS/REL/79th2017/Bill/5347/Overview
NY	https://www.governor.ny.gov/news/earth-day-governor-cuomo-signs-legislation-banning-single-use-plastic-bags-new-york
OH	1 Year preemption: https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA133-HB-242 ; Pending long term: https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA133-SB-222
OK	http://www.oklegislature.gov/BillInfo.aspx?Bill=SB1001
OR	https://www.oregon.gov/deq/mm/production/Pages/Bags.aspx
PA	https://www.legis.state.pa.us/CFDOCS/Legis/PN/Public/btCheck.cfm?txtType=PDF&sessYr=2019&sessInd=0&billBody=S&billTyp=B&billNbr=0712&pn=1085
RI	http://status.rilin.state.ri.us
SC	NA
SD	https://sdlegislature.gov/legislative_session/bills/Bill.aspx?Bill=54&Session=2020

TN	Bag ban pending: http://wapp.capitol.tn.gov/apps/BillInfo/Default.aspx?BillNumber=SB2131&ga=111 ; Preemption: http://wapp.capitol.tn.gov/apps/BillInfo/Default.aspx?BillNumber=HB1021&GA=111
TX	Supreme court ruling: http://www.txcourts.gov/media/1441865/160748.pdf ; Original Preemption: https://statutes.capitol.texas.gov/Docs/HS/htm/HS.361.htm
UT	https://le.utah.gov/~2019/bills/static/HB0320.html
VA	https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+SB11
VT	https://dec.vermont.gov/content/single-use-products-law
WA	https://app.leg.wa.gov/billsummary?BillNumber=5323&Year=2019&Initiative=false
WI	https://docs.legis.wisconsin.gov/2015/proposals/ab730
WV	http://www.wvlegislature.gov/Bill_Status/bills_history.cfm?year=2020&sessiontype=RS&input=2555
WY	NA