RIVALS OR TEAMMATES:
A COMPARATIVE ANALYSIS OF CORPORATE AND LEGISLATIVE POLICY PROGRESS IN BANNING COSMETIC ANIMAL TESTING

SUZANNE SOKOLOWSKI

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Faculty Advisor: Maria Bautista

Public Policy Preceptor: Alexis Pearson

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Abstract

Public opposition to cosmetic animal testing (CAT) has grown significantly, yet little research compares how corporate and legislative sectors have responded to this shift. This study addresses this gap, analyzing which sector—corporate or legislative—has responded more rapidly to rising public controversy and what explains their differing trajectories. I conducted a timeline analysis of CAT bans across 200 global companies and 200 countries from 1994 to 2024, alongside interviews with advocacy leaders. My findings show that corporations have been quicker to adopt CAT bans, driven by consumer pressure, internal incentives, and policymaking autonomy. In contrast, governments faced structural and political obstacles that slowed progress. These findings challenge the application of Dahl's Responsiveness Theory by showing that public opinion is not the only force in reform. I recommend policymakers focus on requiring greater corporate transparency, eliminating legal barriers to cruelty-free practices, and collaborating with the corporate sector to end CAT.

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Introduction

Within the field of animal policy, cosmetic animal testing (CAT) is a topic that has reached near-universal disapproval among the mass public. Corporations and governments have raced to implement bans. Many public companies that manufacture or sell cosmetics have disclosed their own policies, eliminating CAT across their supply chains. In parallel, many countries, including all members of the EU, now prohibit the sale of cosmetic products that are tested on animals. Advocacy efforts have been a strong force in generating this momentum, from targeted campaigns to direct collaboration with legislators. The development of alternative testing methods has largely ensured product safety without the need for animal cruelty (Taylor 2019; Taylor & Alvarez 2020; Silva & Tamburic 2022). As awareness and discourse surrounding the ethics of animal testing has risen over the past century, "cruelty-free" product labeling has become mainstream across cosmetic markets. Research shows that CAT remains an ethical dilemma (Kabene & Baadel 2019; Wang et al. 2020), influencing public attitudes and decision-making (Grappe et al. 2021; Sant 2020). Several studies have explored legislative bans on CAT (Fischer 2009; Fischer 2015; Pauwels & Rogiers 2010; Pistollato et al. 2021), but a gap in the literature persists that acknowledges the development of corporate bans and the dynamics between these two policymaking bodies in ending cosmetic animal testing.

My motivation for this research project stemmed from my interest in both animal rights and corporate policy. I conducted a similar research project in 2023 on the implementation challenges of the California Fur Ban. In this past project, I found that many fashion companies were already adopting fur-free company policies before any legislative action took place, piquing my interest in whether this observation holds in other policy issues, and why it is that companies might respond to public pressure quicker than governments. For my undergraduate thesis, I

chose to focus on the topic of CAT due to its deep-rooted history in animal rights advocacy, which I suspected would provide rich data for a larger-scale project. I hypothesized that, similarly, corporations would beat governments in creating anti-CAT policy.

This project seeks to understand when companies and governments have adopted cosmetic animal testing bans over the past three decades (1994-2024) and the mechanisms behind this progress. Applying the Responsiveness Theory (Dahl 1971) framework helps conceptualize how these institutions have responded to rising public controversy over time. To do this, my study views corporations as similar policymaking bodies to governments, as both are held accountable to public opinion. The original questions guiding my research are as follows: Which policymaking body—corporations or governments—has responded more rapidly to rising public opposition to cosmetic animal testing? More analytically, what are the drivers and inhibitors behind the movement of these sectors?

To answer these questions, both quantitative and qualitative methods are leveraged. I collected historical data on the development of corporate and legislative bans over the past three decades. I created a timeline analysis, measuring the growth each year in the proportion of countries and corporations that have such bans in place. These proportions are presented as unweighted and weighted by nominal GDP and market capitalization, respectively. The scope of this project is global—200 selected public companies within the global cosmetics industry and all 200 existing countries are assessed. These findings are supplemented with interviews conducted with advocacy leaders who serve as experts on this topic. My interviews shed light on the process of how both policymaking bodies adopt these bans, which cannot be captured solely by the timeline.

My findings suggest that corporate policy has reacted more efficiently to rising controversy over CAT. As I hypothesized, companies began terminating their involvement in CAT before legislation took place. For much of the past three decades, companies also have seen a greater uptake of general anti-CAT policies. These findings suggest that corporations are more responsive, under Dahl's theory. My analysis seeks to better understand this trend. The first section of my findings, "The Race in Banning Cosmetic Animal Testing," analyzes the drivers behind corporations moving faster, and the second section, "The Obstacles in Legislative and Corporate Policymaking," analyzes the inhibitors behind these sectors, contributing to slower legislative adoption. My findings paint a broader picture of CAT reform that includes corporate policy—which is largely overlooked—as a key mechanism. This study informs public policymakers in how to work alongside corporations in banning cosmetic animal testing, promoting the need for enablement, transparency, and collaboration across both sectors.

Literature Review

The Responsiveness Theory

Public disapproval of cosmetic animal testing has dramatically risen over the latest decades, with an influx of campaigning and boycotts towards governments and businesses ("Cosmetics"; "Timeline" 2024). Surveys show that consumers around the world are supportive of banning CAT and requiring more transparent labeling in the cosmetics industry ("Public Demands" 2021). Today, there are many advocacy groups dedicated to putting an end to CAT ("Timeline" 2024). Some of these organizations assist in certifying products as "cruelty-free," which they define as free from animal testing at all stages—including on finished products, individual ingredients, and by third parties. Other survey-based studies show that consumers consider a company's animal testing policy in their purchasing decisions (Grappe et al. 2021;

Statista 2017). These developments represent the growing public controversy to which corporate and legislative bodies have been compelled to respond.

This paper extends the Responsiveness Theory (Dahl 1971) to explore how legislative and corporate institutions respond to rising public controversy over CAT. This theory originated from Robert Dahl's (1971) work in exploring democratic systems in his book, *Polyarchy: Participation and Opposition*. Dahl defines responsiveness as the extent to which a political system responds to the preferences of its citizens. Although this theory is used by Dahl in the context of democracies, it provides a useful lens to study a wider range of institutions. I apply a temporal interpretation of responsiveness, focusing on how quickly policymaking bodies, including global corporations and governments, respond to changes in public opinion.

The responsiveness theory has been applied to a wide range of policy contexts, such as gay rights, welfare states, and pollution control (Brooks & Manza 2006; Lax & Phillips 2009; Ringquist 1994). These studies attempt to measure how changes in public opinion correspond to changes in policy. Studies highlight nuances in this cause-and-effect relationship (Manza & Cook 2002; Schumaker 1975). Others show the limitations of policy responsiveness, such as when the response of policy may put more weight on the opinion of subsets within a population (Erikson 2015; Schakel 2021). While much of the literature on policy responsiveness focuses on the legislative sector, a minority extends this model to corporations.

A similar but competing theory is policy congruence, which refers to how well policies align with public opinion at *one point in time* (Arnold & Franklin 2012; Beyer & Hänni 2018). This framework is typically used in analyzing the overlap between policy stances of political parties and their supporters. In contrast, policy responsiveness refers to how policies change in reaction to evolving public opinion *over time*.

Corporate and Legislative Institutions

To understand how responsiveness plays out across corporate and legislative policymaking, it's important to consider the nature of each body and their relationship to one another. Corporations can be viewed as institutions with considerable power over setting forth internal regulations. Much like a government, a company implements business-wide policies, even extending to external partnerships within their supply chain. Several studies illustrate how corporations act as private governments, setting "laws" affecting their employees and other stakeholders (Ciepley 2013; Claassen 2023; Zheng 2022). A unique phenomenon emerges when companies adopt voluntary regulatory standards, which firms may do to avoid new regulation and/or protect their reputations (Vogel 2008). In this way, corporations can be viewed as policymaking bodies.

While policy responsiveness has traditionally been studied in the context of governments, recent scholars have extended principles of responsiveness to corporate actors, particularly within the topic of Corporate Social Responsibility (CSR) (Scherer & Palazzo 2011; Trebeck 2008; Vogel 2005). CSR goals can be broken down into business-related, community-related, and media-related goals (Lim & Greenwood 2017). Vogel (2005) describes how firms engage in CSR as a market-based response to consumer values and public pressure, while Scherer and Palazzo (2011) illustrate how corporations engage with society in ways that resemble democratic accountability. Trebeck (2008) argues that three factors are relevant in the corporate response to social expectations: expectations of corporate behavior, a shift in how communities articulate their expectations, and increased stakeholder capacity to affect corporate operations. It is argued that corporations have an interaction-based relationship with society, where management can iteratively respond to the public in three ways: the tactic approach (reactive measures addressing

immediate concerns raised by stakeholders), the strategic approach (proactively integrating societal expectations into core business practices), and the no action approach (ignoring societal pressures, which may lead to reputational risks) (Lotila 2010). While many companies typically react only to immediate concerns, scholars argue that proactively meeting social expectations is preferable (Lim & Greenwood 2017).

Corporations have a unique relationship with governments, and their interactions can be studied. Companies have long engaged in lobbying efforts, which have been shown to have possible financial performance benefits (Chen et al. 2015). More recently, companies have increasingly advocated for CSR-focused legislation (Kaeb 2018). These cross-sector bodies can also collaborate by forming Public-Private Partnerships (PPPs) (Hodge & Greve 2007). PPPs have even been formed to develop alternatives to animal testing, such as the European Partnership for Alternative Approaches to Animal Testing (Cozigou et al. 2015). While many academics investigate the effects of regulation changes on corporate behavior (Donelson et al. 2023; Parker & Nielsen 2011), a minority of studies consider the relationship between voluntary and legally binding corporate policy.

Background

Animal testing dates back to the ancient Greeks, who performed experiments on living animals around the 5th century BC (Hajar 2011). Since then, animals have been used in biomedical research on a large scale for years in lieu of testing on humans (Sreedhar et al. 2020). Proponents of animal testing, in general, contend that these tests help advance scientific knowledge, while opponents argue that the ends do not justify the means (Hajar 2011). Cosmetic animal testing is distinct from laboratory animal testing in that cosmetics are considered a nonessential luxury. Thus, subjecting animals to cruel testing methods for the development of

these types of products is seen as unnecessary by many. This paper focuses exclusively on CAT, under the assumption that the majority of the public now opposes such tests, and avoids the issue of laboratory animal testing entirely.

CAT has been used to evaluate ingredients, chemicals, and/or finished products to test the safety of cosmetic products. There are a variety of cosmetic tests performed on animals, including the Draize (eye irritation), acute toxicity, skin irritation, ecotoxicity (environment pollution), carcinogenicity (cancer), and reproductive and developmental toxicity testing, and are most commonly performed on mice, rats, rabbits, fish, and guinea pigs ("Types of Animal Tests"). These tests often involve measuring the level at which these animals can withstand chemicals until death or extreme symptoms, inevitably causing unimaginable amounts of pain. CAT methods have notoriously been criticized for their unreliability in predicting human safety in comparison to alternative models ("Cosmetics"), suggesting that there is no need for their use.

According to Cruelty Free International, a variety of alternatives to CAT have been developed ("Alternatives"). In-vitro testing involves using human cells or tissues. Cell cultures can be grown in the laboratory to simulate human organs, while excess human tissue from surgeries can be reconstructed. In-silico testing involves using computer models to conduct virtual experiments using existing data. These tests can make predictions on how substances will interact with human bodies, bypassing the need for human or animal test subjects. Lastly, human volunteers can test these substances, such as through patch tests directly on their skin. These tests can also be used to measure the efficacy of cosmetic products, such as how soft a person's skin feels after using a lotion. Alternatives to CAT replace the need for animal use in testing the safety of cosmetics products.

The history of CAT has been tied to public health regulation and advocacy. In response to safety concerns surrounding pharmaceutical drugs, the U.S. Food, Drug, and Cosmetic Act of 1938 mandated animal testing for product safety (Hajar 2011). This compelled companies globally to begin testing on animals. In 1944, the Draize test was developed to assess substances applied to animals' eyes and skin, and it soon became the gold standard for testing cosmetic products for decades to come ("Timeline" 2024). It was not until the 1980s and 90s when anti-CAT campaigns and advocacy ramped up. In 1980, a successful campaign against Revlon was led by Henry Spira to end their use of the Draize test ("Timeline" 2024). In 1996, the Leaping Bunny Program, a prominent certification for cruelty-free cosmetics, was launched ("Cosmetics"). By 1998, the United Kingdom became the first country to ban CAT for products and ingredients ("Timeline" 2024). Since then, an increasing number of companies and countries have implemented bans against CAT.

Academic research on cosmetic animal testing has largely overlooked the relationship between corporate and legislative policy development. Much of the existing literature on CAT explores the ethics of CAT (Kabene & Baadel 2019; Wang et al. 2020), consumer attitudes toward products tested on animals (Grappe et al. 2021; Sant 2020), or the scientific development of testing alternatives (Silva & Tamburic 2022; Taylor 2019; Taylor & Alvarez 2020). While some legal scholarship examines legislative CAT bans, particularly in the EU (Fischer 2009; Fischer 2015; Pauwels & Rogiers 2010; Pistollato et al. 2021), little research has explored the role of internal corporate policies in shaping CAT reform. Even fewer studies examine the interaction between corporate and legislative efforts. This paper addresses that gap by comparing their responsiveness to public opposition toward CAT, offering new insights into how reform is achieved through a combination of timeline analysis and expert interviews.

Methodology

The data collection process for this research was twofold, combining a timeline analysis of corporate and legislative bans with interviews conducted with advocacy leaders. This approach allowed for a more comprehensive analysis by integrating both quantitative and qualitative perspectives.

Timeline Analysis

The objective of my timeline analysis was to depict progress on both legislative and corporate fronts in banning cosmetic animal testing. On the legislative side, I first obtained data on countries using their most recently available nominal GDP figures (Appendix B). This data was originally collected by the World Bank and accessed through Worldometer. The list identified 200 countries and regions for my analysis, excluding those like North Korea and Gibraltar where no reliable data was available. Next, I used external sources—particularly the Humane World for Animals—to identify the years when different countries implemented CAT bans. While recognizing that each legislative ban is unique, I generalized the presence of any ban in my counting for consistency. From this, I analyzed the proportion of governments with bans in place over the past 30 years. Progress—defined here as the cumulative adoption of anti-CAT policies—could then be visualized over time as more countries enacted similar legislation. In a separate analysis, I weighted this proportion using nominal GDP, following the logic that a ban from a country with a larger economy has greater market relevance. While this weighting does not aim to measure the actual impact of legislative bans, it provides additional context around the relative significance of progress across countries.

In parallel, I collected data on corporate progress. Like governments, corporations have created their own company-wide policies against CAT. Measuring this type of progress

introduced greater complexity, as corporate policies tend to be more vague and less transparent than concrete legislative bans. I found that companies adopt animal testing-free policies to varying degrees. To account for this variation, I categorized corporate bans under three levels based on patterns in the exceptions that companies make when animal testing may still occur. Companies with anti-CAT policies generally fell into one of the following categories: (1) no exceptions, (2) exceptions when required by law, and (3) additional exceptions related to perceived societal responsibilities. In Level 1, companies often go through certification processes to ensure that no part of their supply chain is involved in animal testing under any circumstances. These certification programs include the Leaping Bunny Program and PETA's Beauty Without Bunnies Program. Level 2 includes companies that do not conduct CAT but make exceptions when required by law, such as when selling in markets like China. Level 3 includes companies that add language related to broader social accountability. These exceptions can be interpreted in different ways, but I included these companies in my analysis because they still have some form of publicized anti-CAT corporate policy. These three levels are summarized in the following table.

Table 1. Levels of Companies Included in Timeline Analysis

Level	Definition	Notes
1	Companies with strict CAT bans with no exceptions	Some companies in this tier have "cruelty-free" certifications
2	Companies in Level 1 + companies with CAT bans that make exceptions when required to by law	Common for companies that want to have strict CAT bans but sell cosmetics in China
3	Companies in Level 2 + companies with CAT bans that make exceptions when held accountable by society	Generally includes all companies with some sort of anti-CAT ban

While many activists argue that any exceptions to a company's anti-CAT policy disqualify it from being considered "cruelty-free," my research focuses on the development and publication of these policies, rather than adherence to a specific ethical label. Progress under the strictest definition can still be viewed under Level 1, but including the other two levels allows for more nuanced findings. My research prioritizes public disclosures of corporate policies, rather than whether a company engages in CAT in practice. In addition, many companies I examined were parent companies with multiple brands, some of which were cruelty-free. I only considered company-wide policies, just as I considered only national bans—excluding state-level legislation—in my legislative analysis. Most companies I came across during this process did not publicize where they stood on animal testing. These companies lacked any public anti-CAT policy and were therefore treated as not having a ban in place.

To analyze corporate progress, I created a database using Refinitiv Workspace. I used its company search tool to screen for "Personal Products" under the TRBC Industry Name, which initially returned 274 companies as of January 2025. Through the database, I retrieved relevant columns such as Ticker Symbol, Business Description, Country of Headquarters, and Market Capitalization. I exported the full dataset to Excel for further research and analysis. I then sorted the data by market capitalization to focus on public companies, which are more relevant to this study. I assumed that private companies were less likely to publicly disclose CAT policies, making them more difficult to evaluate using consistent criteria. I excluded companies that fell within the "Personal Products" category but were subsidiaries of other companies already in the list or did not manufacture or sell relevant cosmetic products. For example, products like toilet paper were not considered relevant to CAT. After filtering the dataset, I selected the top 200 companies for further analysis to correspond with the 200 countries included in my legislative

analysis. It is important to note that many of the companies included in my analysis sold both cosmetics and non-cosmetics.

Next, I manually conducted research and collected data on each of the 200 companies. I looked for any public disclosures related to their CAT policies, including press releases, annual reports, sustainability reports, webpages, FAQs, and other publicly available documents. I also looked for the year in which each company adopted a given CAT policy to support my timeline analysis. In addition, I collected information on whether a company disclosed investment in alternative testing methods and whether it held any cruelty-free certifications.

One challenge was determining the year in which a company adopted an anti-CAT policy. To address this, I reviewed annual reports to identify the first instance in which a company disclosed its policy. In other cases, I made conservative estimates. For example, if a company stated that it had been cruelty-free for "over 30 years," I used a start year of exactly 30 years ago. When information about adoption years was limited, I contacted companies directly. In rare instances where data remained missing, I assumed the company adopted its policy in the same year that its country of headquarters enacted a legislative ban. Using this sequence of strategies, I was able to complete the dataset for all companies included in the analysis.

I sorted these companies based on market capitalization because it was the most complete financial indicator available and automatically excluded private companies. When weighing data, I used market capitalization as a proxy for economic influence. The logic behind this approach is that when a company with a larger market cap adopts an anti-CAT policy, the policy may carry more weight in the global market. This weighting was not intended to compare the impact of corporate versus legislative bans, but rather to offer additional insight into trends across

companies of different economic sizes. These companies had a wide range of market capitalization values (Appendix B) and broad global presence (Appendix C).

Once I had my data on the adoption of both legislative bans and corporate bans, I was able to create a timeline starting with the year 1994. For each year, I calculated the proportion of countries and companies (out of 200 each) that had implemented a ban by that point. I produced both an unweighted and a weighted illustration to show the proportion of policymaking bodies with bans in place over time. My calculations were cumulative, so once an institution adopted a ban, it was counted in the proportion for all following years. As a result, the proportion of both countries and companies increased over the three-decade period.

Interviews

To complement my quantitative timeline analysis, I elicited qualitative insights from 8 advocacy leaders through interviews (Appendix A). While my quantitative analysis was based on only publicized information, these interviews served to provide behind-the-scenes knowledge in how governments and companies responded to public controversy. Interviewees were leaders representing a total of 7 different organizations dedicated to the advocacy of banning CAT. These organizations included certification programs, scientific communities, and those involved in traditional advocacy work such as large campaigns. Interviewees were all English-speaking, but together represented a global view. However, interviewees were more heavily concentrated in North American and European markets.

I obtained these interviews by requesting them from 18 relevant advocacy organizations, through general contact emails, and by messaging 16 advocacy leaders directly via LinkedIn. Organizations that responded to my request typically connected me with their top point person. As such, my 8 interviews, although small in number, represent perspectives of subject matter

expertise. I did not interview more than two leaders from the same organization. Furthermore, I avoided interviewing advocacy leaders focused on laboratory rather than cosmetic animal testing, but due to the intertwined nature, many interviewees had experience advocating against both forms of animal testing.

Interviews were conducted in February and March of 2025 using Zoom and were semi-structured, each lasting approximately 30 minutes. An interview guide, containing a predetermined list of questions and probes, was used to standardize the data collection process (Appendix D). On average, I asked each interviewee 7 questions about their role, their organization's advocacy work, and their observations on progress throughout the years. My questions encouraged advocacy leaders to make distinctions between corporate and legislative work. Interviews were recorded with consent and transcribed using Otter.ai. These transcripts were then cleaned against meeting recordings and coded manually.

After completing my timeline analysis, the coding process for my interviews involved first reviewing notes taken during these meetings. I identified four core themes across interviews that were supported by my timeline analysis. I then took a closer look at each interview and highlighted relevant quotes that fell under one of these themes. I later consolidated these themes, translating into the two subsections of my Findings and Analysis section. What stood out to me from these interviews that was not apparent in my timeline analysis was the emphasis on the need for both corporate and legislative progress. I was originally focused on which pathway is more responsive than the other, but the insights from my interviews made me better understand the dependent nature between these two policymaking bodies.

Findings and Analysis

To conceptualize the progress of anti-CAT policymaking in both legislative and corporate settings, the graphs below illustrate the unweighted (Figure 1) and weighted (Figure 2) proportion of countries (n=200) and companies (n=200) that have anti-CAT policies in place for each year between 1994 and 2024. In Figure 2, governments are weighted by nominal GDP, and companies are weighted by market capitalization. For example, if in a given year two companies and two countries adopted CAT bans, the unweighted proportion (Figure 1) would increase by 1% for both sectors. However, the weighted proportions (Figure 2) might increase differently, depending on the economic size of the actors involved. For instance, if one country represented 30% of the global aggregate nominal GDP, the proportion of countries with CAT bans would increase significantly more in the weighted figure. The same logic applies to companies and their market capitalization.

As elaborated in the methodology section, company bans are categorized into three levels based on the exceptions allowed in their anti-CAT policies (Table 1). Level 3 includes companies with legal, social, and/or no exceptions to their bans. Level 2 includes companies with legal and/or no exceptions. Level 1 includes only companies that have no exceptions to their bans. These three categories are not mutually exclusive—each upper level includes the level(s) below—and represent the ambiguity in defining anti-CAT corporate policy. Notably, only Level 1 companies are considered “cruelty-free” by most animal advocacy organizations.

Each figure is a line graph with four lines. The brown line represents legislative progress, while the three blue lines represent corporate progress under each of the three policy levels. The horizontal axis represents the year (1994-2024), and the vertical axis shows the proportion of countries or companies (as a percentage) with bans in place. In both figures, the proportion of

countries with bans begins at zero in 1994, while some companies already had policies in place. Across both figures, the proportion of companies with Level 3 bans consistently outpaces legislative progress.

Figure 1. Unweighted Progress in Banning Cosmetic Animal Testing

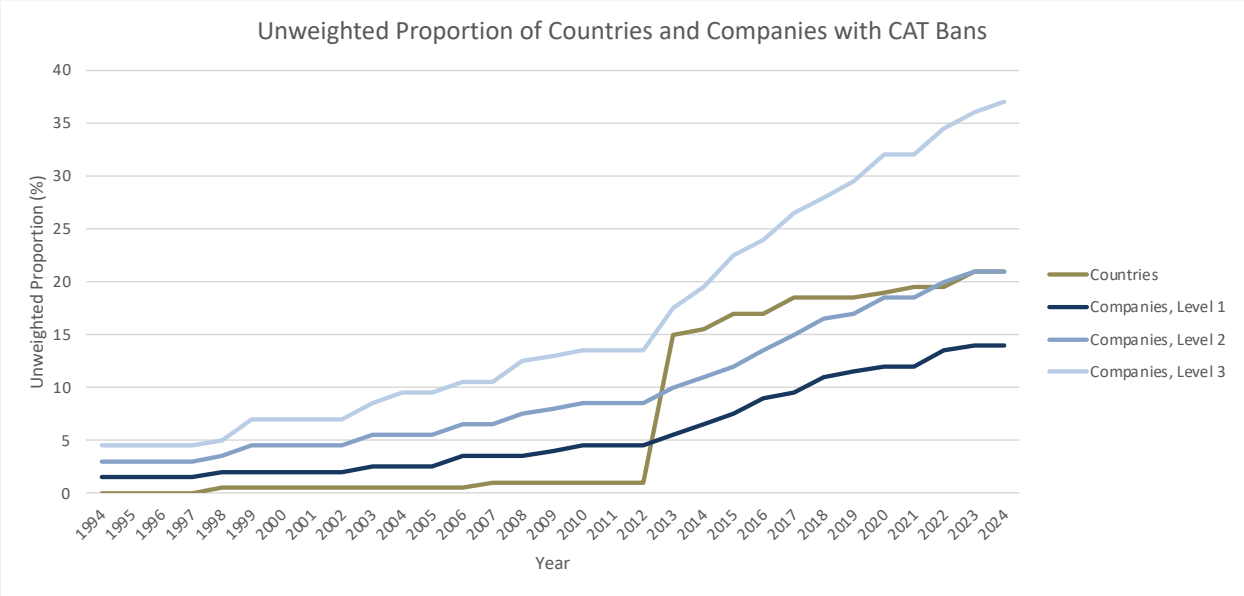

Figure 2. Weighted Progress in Banning Cosmetic Animal Testing

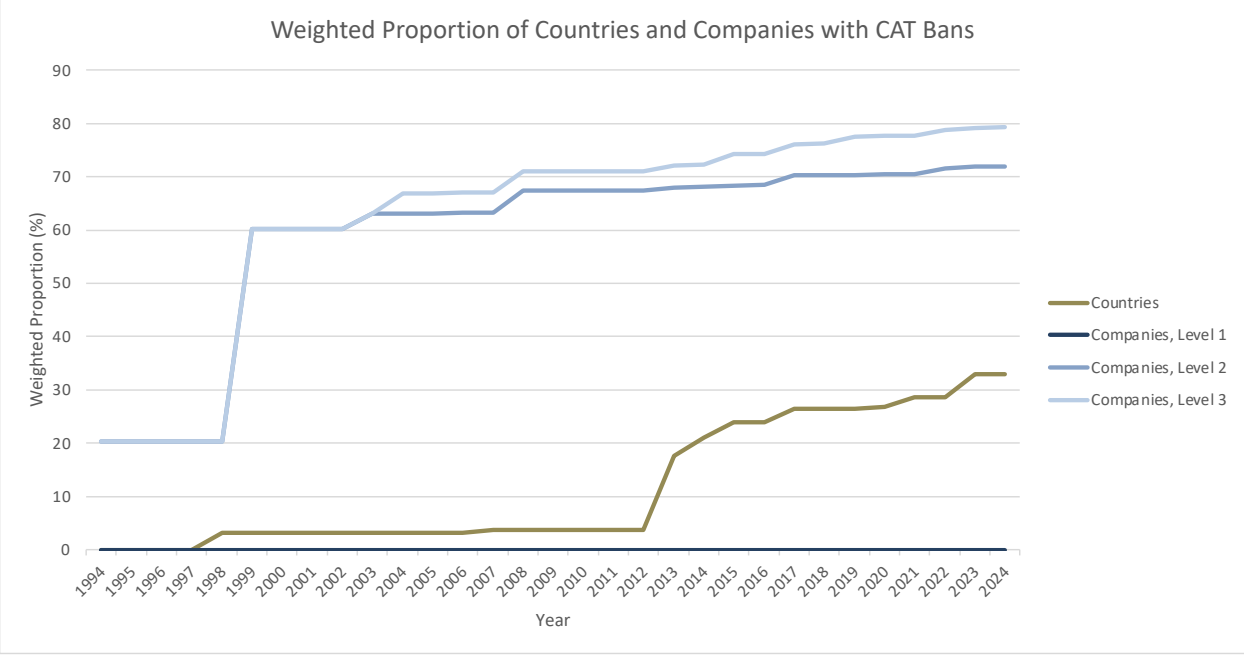

Figure 1 depicts unweighted corporate progress as more gradual over time compared to legislative progress, which remains relatively stagnant until 2013, when the EU-wide ban drives a sharp increase. By 2024, 21% of countries have CAT bans in place, compared to 37% of companies with some form of anti-CAT policy (Level 3). Additionally, 20% of companies have policies with legal or no exceptions (Level 2), and 14% of companies report policies with no exceptions (Level 1).

Figure 2, once weighing the countries and companies to get a better sense of the economic relevance of each ban, offers additional insight. The graph depicts a strong difference between the weighted proportion of companies in Level 1 and those in Levels 2 and 3. Interestingly, the weighted proportion of companies in Level 1, once accounting for market capitalization, is close to insignificant throughout this period, revealing how company size plays a role in the level of the ban they adopt. In 2024, there is a 77.2 percentage point gap between the weighted proportion of companies with full bans (Level 1) and those with any form of ban (Level 3). Once weighted, the proportion of Level 3 companies rises to 79.2%, compared to 37% in the unweighted figure. In contrast, the proportion of Level 1 companies drops significantly once market capitalization is considered.

While my timeline analysis does not involve inferential statistics, it offers a visual, quantitative comparison of policy adoption over time. These findings help inform a broader analysis of responsiveness across sectors. The corporate sector appears more responsive overall, demonstrating earlier adoption and greater uptake of general anti-CAT policies (Level 3). However, in the stricter categories (Levels 1 and 2), legislative progress eventually surpasses corporate efforts (Figure 1). Insights from this analysis are discussed in the remainder of the Findings and Analysis section, with the incorporation of interview data. The first subsection

analyzes the drivers in how companies have been able to act quicker in banning CAT. The second subsection takes a closer look at the challenges these policymaking bodies face in placing these bans, illustrating why governments may respond more slowly.

The Race in Banning Cosmetic Animal Testing

The progress in ending cosmetic animal testing can be viewed as a race between governments and companies. It can be argued that companies have won this race, as they have swiftly responded to public concerns over CAT. Some drivers behind the movement of the corporate sector include rising public controversy, organized campaigns, internal incentives, investment into the development of alternative models, and the level of autonomy companies have. While the Responsiveness Theory helps explain how corporations have reacted to growing societal pressure, it does not account for all of these drivers. This section explores both responsiveness-based and independent drivers that prompted earlier and faster action in the corporate sector.

Rising public controversy in the 1980s and 1990s pushed several companies to adopt CAT bans well before any national legislation was introduced. As illustrated in Figures 1 and 2, corporate progress was already underway before 1994. The first country to release an anti-CAT ban was the UK in 1998 (“Timeline 2024”), yet before 1998, almost 5% (unweighted) of companies already had some form of an anti-CAT policy (Figure 1). A key driver of early corporate change was the shift in public sentiment, which companies were particularly responsive to. As one advocacy leader, Eleanor, noted, “corporations will be the first to act because they want to stay in the good graces of the consumers who buy their products.” This aligns with Responsiveness Theory, which suggests that policymaking bodies respond to the preferences of those they serve (Dahl 1971). In this context, responsiveness is reflected in

companies' attention to consumer opinion and reputational risk, which can directly influence corporate performance. Eleanor explained, "the dollar rules everything, right," and emphasized that when sales begin to decline in favor of more humane alternatives, companies are likely to change their practices. This is supported by studies showing that CAT policies influence consumer purchasing decisions (Grappe et al. 2021; Statista 2017).

Corporate progress has been marked by gradual movement, using 1994 as a baseline (Figure 1), corresponding more naturally to the change in public controversy. If we assume that public controversy has risen relatively consistently and gradually since 1994, Figure 1 suggests that companies seem to respond in real-time to shifts in public opinion. In contrast, legislative progress saw a significant jump in 2013 with the EU-wide ban. However, no significant changes between 2012 and 2013 occurred prior to this legislative progress ("Timeline"), highlighting a pace of legislative action that is more abrupt and, at times, arbitrary in its timing. Corporate movement reflects incremental changes in public opinion, suggesting that this sector is more "responsive" to changes in public opinion. A prominent manifestation of public opinion takes the form of campaigns. While some companies may be more proactive in changing policies to align with social pressures, other companies may be prompted by direct pressures, such as campaigns. These avenues for corporate bans represent the strategic and tactic approaches outlined by Lotila (2010).

Organized campaigns have been instrumental in driving corporate movement, pushing companies to ban their use of CAT. Governments, in contrast, may less commonly be recipients of this form of targeted CAT-related pressure. Giselle discusses how "there was a large public pressure campaign put on companies in the 80s and 90s," resulting in the first round of corporate bans. Campaigns have been regarded as important catalysts throughout the past half century

("Cosmetics;" "Timeline" 2024). These initiatives, often led by advocacy organizations, aim to empower consumers through awareness. For example, Alex, a representative from a large advocacy organization, shares, "We are currently putting pressure on Revlon, MAC Cosmetics, and Estée Lauder to ban all tests on animals. We posted this Instagram Reel a few weeks ago" and adds, "we definitely try to use public education to influence these corporations." Advocacy groups recognize that educating the public heightens controversy around CAT—something they know companies are particularly responsive to. Social media has become an especially important tool in this process. This use of social media represents one of Trebeck's (2008) factors relevant in the corporate response to social expectations: a shift in how communities articulate their expectations. Sophia adds, "public education is a big part of [advocacy], because consumer pressure is what's really turned the industry to focus on alternatives because they know it's what the consumers want." When consumers learn what CAT entails, they put pressure on companies to change. In addition to public education, Gracie describes another strategy her organization uses: targeting major industry players. She recalls that after campaigning for several years against Starbucks to drop its vegan upcharge, the group quickly shifted focus to Dunkin Donuts, which responded in just a few weeks. A similar approach applies to the cosmetics industry, where pressure on large brands is seen as a way to influence the rest of the market. Gracie explains that once major companies implement animal-friendly policies, it becomes common for others to follow. Companies often look to industry leaders when shaping their own policies. This trend is reflected in the timeline analysis, which shows that by 1999, 60 percent of companies (weighted) have some form of anti-CAT policy (Figure 2). This elevated figure is largely driven by early action from large, heavily weighted companies—many of which are among the first to implement policy changes. As targets of advocacy campaigns, these companies face greater

pressure to act quickly and set an example for the rest of the industry. As public opposition continues to rise, these campaigns—through public education and strategic targeting—remain a visible and persistent form of social pressure driving progress in this sector.

While the Responsiveness Theory helps explain how companies react to public pressure, through consumer preferences and organized campaigns, it does not fully account for all the drivers behind corporate progress. Some companies have banned CAT not simply in response to rising public opposition, but because of internal or strategic benefits. For example, Krista, a science advisor, points out that cost-saving incentives can influence companies to eliminate CAT, noting the "cost of housing, caring for animals, [and the additional] time it takes to collect data." Financial considerations—both on the cost side and in terms of long-term revenue—can encourage companies to shift toward animal-free alternatives. These internal drivers can make corporations appear highly responsive, even when their actions are not directly tied to public opinion. In contrast, governments are often less able to act quickly, partly because they must consider a much wider set of factors that extend far beyond a narrowed focus on corporate performance. As Giselle elaborates,

> With corporate work, it's a lot of just trying to get companies to see the benefit to them for doing something, and then with the policy work, it's more so convincing legislators why this isn't actually going to harm anyone … They're very nervous about going too far.

Corporate actors are often motivated by direct benefits to their performance. These motivations reveal underlying differences between companies and governments, helping to explain why companies may be better suited to be more responsive. Bridget, another interviewee, emphasizes that "corporations in general want to see the change that we want as well. It benefits them. Oftentimes its cheaper, it's more ethical, and all kinds of other benefits." Bridget adds an acknowledgement of the human-side of companies, in which the people running these companies are averse to unethical practices. Advocacy organizations often step in to support companies that

already want to transition toward cruelty-free practices. Another incentive for companies to change is the scientific legitimacy of their practices. According to Krista, a science advisor, "Anytime you're working in a human model and you're trying to predict what happens in people, there's a more direct correlation than working with animal cells or animal models." As it's been noted, working with animal models has been notoriously criticized for its accuracy in measuring the safety of cosmetics ("Cosmetics"). Scientists working at companies have had strong voices, often working internally to get companies to switch. These cost-based, moral, and scientific incentives help explain why companies have led the shift away from CAT, independent of public opinion alone.

The development of non-animal testing models, largely due to corporate investment, has enabled corporations to adopt alternative models. Large companies began this investment early on, before they were required to use them by any regulations. In my analysis, 14 of the top 20 largest companies (by market cap) report having invested into the development of alternative testing models. Now, as a result of efforts like this, a multitude of alternatives exist ("Alternatives"). Large companies began shifting towards alternatives several decades ago largely because company scientists have pushed for this. Giselle contemplates,

> The thing that's interesting about our relationship with even the bigger companies is on the scientific level, their company scientists were always interested in moving in this direction … It's better for [their] PR, frankly, but it's also just better science because it's going to be based on human relevant information.

This reveals an important dynamic between advocacy organizations and large corporations, as their scientific teams have often served as internal change-makers. Sophia talks about how "cosmetic companies invested in alternatives because they saw the writing on the wall a long time ago that consumers were not having it," further suggesting that companies were able to act quickly in shifting away from CAT. Sophia goes on to provide examples of some of the large

companies that have been influential in this development, noting that "[L'Oreal, P&G, and Unilever] are the big companies that have a lot of money and invested in [the] development of non-animal alternatives starting way back." For example, I found in my research that, according to their website, L'Oreal pioneered the development of human reconstructed skin as an alternative to CAT over 40 years ago (L'Oréal 2020). Sophia acknowledges that, unlike smaller companies, these larger companies have large amounts of resources. For instance, some companies in my analysis have larger market capitalizations than many countries (Appendix B). As such, they have great power in generating momentum for this type of progress. Interestingly, Krista notes,

> Companies really wanted to be on [our certification] list, and they really didn't like it if they were not considered 'cruelty free.' And some of the things that they would say if they weren't listed is, 'You don't know how much money we are investing in developing the non-animal models!'

This reflects not only a desire to be recognized for their efforts, but also the degree of control companies have over how they define and present their progress. Early investment into alternatives has given corporations a long runway to shift away from CAT—on their own terms—and has positioned them as leaders in the transition well before governments were able to act.

Corporations have greater flexibility and autonomy than governments, allowing them to respond more rapidly to changes in public opinion. This once again doesn't fully align with Responsiveness Theory, which focuses on whether institutions respond to public preferences, but overlooks how much control they have over when they make that response. As suggested by Figure 2, it is very uncommon for companies with large market capitalizations to have strict anti-CAT policies (Level 1), as they are more likely to sell in markets that legally require CAT and desire protective caveats in their policies. It is mostly smaller companies that have these full bans

(Level 1) in place. According to Giselle, “It’s frustrating for [larger companies], of course, but unfortunately, they're businesses first, and they make decisions that make sense for them—business wise—which includes those sorts of caveats about ‘unless required [to by law].’” Giselle punches directly at the notion that companies have to make decisions on how to frame their anti-CAT policies. This results in many global companies adopting looser policies to allow them to sell in certain markets. The three-level classification system used in this study highlights how companies exercise discretion in determining the strength of their bans. Because they are not bound by the formal legislative processes that governments face, corporations have the freedom to craft policies that align with both public expectations and business priorities. This structural flexibility allows for faster, more adaptive forms of policymaking—though not necessarily more impactful ones—contributing to the appearance of more rapid responsiveness across the private sector. Furthermore, Jen mentions that companies can often self-identify their status on CAT without needing to provide substantial proof. This lack of external enforcement gives companies even more freedom in shaping how their policies are presented. This ability to define the terms of their own policies enables corporations to move faster than governments, whose responses are often delayed by inherent formal legislative processes.

Corporations have generated enough momentum within their sector that, in some cases, they have helped drive legislative movement. Smaller companies with strong ESG commitments have been especially active in advancing reform. Giselle points to Lush as a company that played a direct role in supporting the EU ban, explaining that the company “put out reports about where they were at with the alternatives and why there was no reason to delay the implementation.” In Canada, Sophia recalls a ten-year effort that involved The Body Shop, which helped collect in-store signatures from consumers in support of a national ban. These signatures were eventually

delivered to Parliament as part of a broader campaign. These examples may reflect a pattern: smaller, mission-driven companies are often early movers that establish cruelty-free norms, which then influence larger companies and ultimately contribute to changes in public expectations and policy. This observation exemplifies how the economic weight of companies (Figure 2) does not translate to their impact. As Jen explains, cruelty-free branding has moved from being associated with niche, eco-conscious companies to becoming a mainstream corporate objective. These leaders in corporate social responsibility depict the interesting phenomenon that we see in companies placing voluntary standards onto themselves without regulatory intervention (Vogel 2008). While these smaller companies may not have reshaped the market through investment or scale alone, they have played an important role in setting ethical standards and laying the groundwork for legislative reform. Their involvement reflects yet another way in which corporate actors have led progress in this area, often ahead of government action.

Corporate actors have played a central role in advancing anti-CAT policy. From swiftly responding to public pressure—in the form of consumer pressure and organized campaigns—to investing in alternative testing models, companies have shown an ability to act early and often ahead of regulation. Their progress is driven not only by responsiveness to consumers but also by internal incentives related to cost, science, and ethics. In many cases, corporate flexibility over their policies and goals have enabled faster action than what is possible through formal legislation. Some companies have even helped set expectations that influence public norms and legislative direction. While this leadership is not uniform across the industry, it reflects how structural advantages within the private sector have positioned corporations to move more quickly than governments. The following subsection examines why governments have been slower to act and explores the obstacles in implementing CAT policy.

The Obstacles in Legislative and Corporate Policymaking

Although corporations appear more responsive to public opinion, this advantage does not reflect a lack of effort from governments. Rather, it highlights the substantial structural and political challenges governments face in policymaking. This subsection examines the obstacles that slow down legislative bodies in banning CAT, as well as legislative barriers corporations encounter in attempting to eliminate CAT. These obstacles also complicate how responsiveness is expressed across sectors. While Dahl's Responsiveness Theory suggests that policymaking bodies reflect the preferences of the public, the degree to which they are able to act on those preferences is constrained by structural, legal, and operational factors—particularly in the public sector.

One of the most significant challenges governments face is the constraint of their political systems, which complicates efforts to move legislation through complex and often lengthy processes. As Eleanor puts it, "everything legislatively works at a snail's pace." In countries like the United States, federal bans on CAT remain stalled. Eleanor continues, explaining how the federal Humane Cosmetics Act in the US has "been introduced in numerous congresses. And each time it's introduced, you work on getting sponsors and cosponsors, and you work on educating all of [the legislators], and then Congress changes every two years, and so you start the process over." These repeated hurdles reflect the broader reality that each country's unique political system introduces delays that are difficult to overcome. Krista echoes this frustration, describing the lack of U.S. federal action as disappointing and saying, "that seems like low-hanging fruit." Despite the fact that alternatives exist ("Alternatives"), animal models have been shown to be ineffective ("Cosmetics"), and many companies are already ahead of regulations, it takes governments longer to enact such policies. Krista continues, "Europe kind of paved the

way and made claims that we're not doing this a long, long time ago. In general, the United States historically has always been slower than other countries." Even in countries that have successfully passed these laws, the process can take years. Sophia shares, "We worked on the Canada legislation for 10 years, and we were finally successful." Passing anti-CAT legislation is a process that takes time, and each country is subject to the systems they have in place. This lag in legislative policymaking impedes their level of responsiveness, as their institutional structure makes it difficult to act on public preferences in a timely way. These structural features of legislative bodies contribute to a slow pace of CAT policy adoption, in contrast to the greater flexibility corporations have in initiating internal changes.

In addition to structural barriers, governments must navigate competing stakeholder interests, often resulting in prolonged negotiations over the specific details required for a CAT ban to function as intended. According to Sophia's experience,

> Legislation is always a process, and you're always compromising in order to just move the ball. But then sometimes there can be some unintended consequences. Or you think you have something really solid, and then you get into the details, and they start eroding … or you start seeing loopholes being exposed.

This highlights just how many considerations and layers of negotiation are involved in legislative policymaking. Compromise becomes a central obstacle, especially when a wide range of interests must be balanced. Each stakeholder—whether from industry, advocacy, or regulatory backgrounds—brings their own agenda to the table, making negotiations complex. Furthermore, creating a legislative CAT ban involves numerous legal nuances that are beyond the scope of this project, including exceptions, implementation tactics, enforcement mechanisms, loopholes, and penalties. Giselle recalls one example, "My colleagues and I spent 18 months in intense negotiations with industry … And when we finally reached that agreement and had the final bill review done, we were like, 'Okay, now we can hold hands.'" These negotiations can become

intense when corporations, who these laws are aimed at, are part of these conversations. However, once this agreement is reached, it can feel very relieving for all parties. Sophia frames a similar story about working with corporations, “realizing that, actually, we want the same things, we just disagree on how to get there.” Reaching agreement across these stakeholders is possible, but often requires strenuous collaboration and time. This process often leads to compromise and delay, hindering legislative responsiveness to the public opposition of CAT.

Even when CAT bans are successfully passed, implementation presents its own set of challenges, as policies must be phased in, enforced, and defended over time. To ease the transition for affected stakeholders, many governments adopt a phased approach. Sophia shares as an example, “Think about how long it took the EU animal testing bans to come into place? It means, you know, decades. And then once they're in place, you have to defend them, because there's all the attempts at weakening them.” Before the EU’s ban took full effect in 2013—creating a drastic appearance of legislative progress shown in Figures 1 and 2—it was rolled out in stages over many years, beginning with the ban on testing finished products, followed by individual ingredients, and eventually including the sale of products tested on animals (“Timeline”). This demonstrates how a commitment to ban CAT does not always translate into immediate change. Even once bans are fully in place, they are susceptible to being ripped down. Eleanor notes a related example, “We passed a bill called the FDA Modernization Act a few years ago, … but the FDA has yet to act on it.” Even when legislative strides in ending CAT take place, it can take additional time for these laws to become implemented, further diminishing legislative responsiveness. This gap between legislation and enforcement complicates the interpretation of responsiveness as mere policy adoption, raising the question as to whether it should also account for successful implementation. These bans are often subject to

administration by different agencies, which can delay these reforms. Eleanor also points out that "the bottom line is those bills still allow for a lot of animal testing to continue." CAT bans are rarely all-encompassing and fall short of eliminating CAT completely. There are loopholes and limitations, making these legislative bans imperfect. Sophia expresses, "legislation is really hard—you're not going to get everything that you want, but you do it anyway because you know it is the one thing to really move the bar." While legislative CAT bans represent meaningful progress, further limitations to their implementation often fall short of public expectations. Rather than phasing in legislative policy across a wide area, such as the EU, other legislative bodies chose to begin on a smaller scale, providing another time-consuming avenue to reach full, national-level bans.

Facing systemic and political constraints, governments often resort to an incremental approach, passing local or regional bans before broader national legislation. For example, in the US, California has placed its own ban on CAT before federal lawmakers have been able to do so. Bridget notes optimistically, "now, if you want to sell in the US, you basically have to abide by California's rules." Although legislative processes may be slower than for corporations, even these smaller wins can generate meaningful impact. Sophia explains how state laws served as "testing grounds" for any issues with legislation that "were [then] worked out and then incorporated into the federal Humane Cosmetics Act." Giselle similarly reflects on how the language of this federal bill has been informed by lessons from these state trials. A comparable pattern occurred in Brazil, where São Paulo banned CAT in 2014, followed by Rio de Janeiro in 2017. It was not until 2023 that the national government banned CAT nation-wide. In legislative policymaking, it could be argued that regional policies can pave the way for larger-scale policymaking. However, as Sophia notes, "working with companies can be quicker, because a

company can make a decision what they're going to do." While corporations may also need time to implement their own company-wide policies, they are not bound by the same political constraints that governments face. While these local victories can lead to broader national change, the incremental nature of legislative policymaking contributes to a slower overall timeline compared to the corporate sector.

While corporations can often act more quickly, their progress is sometimes constrained by outdated or inconsistent legislative regulations across markets. Bridget explains, "A lot of these organizations, they didn't even want to do animal tests, but the regulations were like, 'You have to.' And so, they're fighting back." She shares a specific example of how sunscreens have recently become considered over-the-counter medications in the US and therefore now require animal testing. This illustrates a misalignment between corporate and legislative policy, where a lack of animal protection laws results in situations where companies are legally obligated to conduct CAT. Even companies that want to adopt stricter anti-CAT policies must often make exceptions in order to access certain markets. This reality is reflected in my timeline analysis, which categorizes companies based on the exceptions written into their policies. Larger companies are more likely to run into these legal obstacles, as demonstrated in the weighted corporate progress (Figure 2) showing that larger companies tend to fall into Levels 2 and 3. Eleanor further highlights how regulatory guidance shapes corporate decisions:

> If you're a person who is developing a new drug or a new cosmetic, you want to get that cosmetic to market as fast as possible. And so, you're going to take the route of least resistance, and that's going to be the route of the guidelines given out by the FDA. And right now, the FDA guidelines still say you need to do all this animal testing, so that just needs to change.

The law can often act as a barrier to companies that want to reform their testing methods. Krista elaborates on this challenge, describing a company's thought process: "We want to sell to these countries. These countries require it, so by definition, we're not cruelty free—we do tests to get it

sold here—and then you want the company to [decide], 'Well, don't sell there.' And that's not going to happen because companies need to make money." Although many companies may prefer to operate under a full ban (Level 1), it is a difficult business decision to avoid markets where CAT is required. Ultimately, laws must evolve to enable more companies to follow more ethical testing practices. As Bridget concludes, "if we can get the government regulations to change, … it allows the corporations that want the change to implement it, and it forces the corporations that don't want to change, to change." These legal barriers can prevent even well-intentioned companies from fully eliminating CAT, revealing the ways in which corporate policy is sometimes held back by legislative lag.

One challenge that affects both governments and corporations is the lack of a universally recognized definition of what constitutes a ban on cosmetic animal testing. Giselle illustrates how this has created confusion historically, recalling that:

> There was a large public pressure campaign put on companies in the 80s and 90s, where the companies felt compelled to say, 'we decided we're not going to test on animals anymore.' But unfortunately, a lot of those claims were a little misleading because what they were talking about was their products and not the ingredients.

These kinds of nuances reflect broader difficulties in defining what a comprehensive ban should look like. While this lack of clarity can cause misleading claims in corporate contexts, it also complicates legislative processes, as stakeholders must reach agreement without a shared understanding of what a ban entails. This contributes to lengthy discussions and negotiations, as analyzed earlier. Jen similarly notes, "a company can essentially self-identify as cruelty free without having to substantiate the proof. And so, there's a lot of confusion around it. It was why [our certification program] was originally formed." Jen addresses how companies can disclose their anti-CAT policies with limited regulatory oversight. This is why certification programs, like the Leaping Bunny program and PETA's Beauty without Bunnies program have emerged. These

initiatives provide clear criteria certified companies must meet to be labelled “cruelty-free” and work to hold them accountable. In this way, their voluntary nature highlights the gaps left by formal regulatory systems. Gracie notes how these certification standards that have become part of product labeling, helping consumers make informed purchasing decisions. This is particularly relevant, as literature has shown that knowledge of a company’s CAT policy influences whether consumers buy a product (Grappe et al. 2021; Statista 2017). Krista also raises the challenge of labeling, asking:

> How do you label yourself? Is it your final product that's not tested on animals? What about your raw ingredients? Are they tested on animals? It's so murky because there's no legal definition of cruelty free or not tested on animals. … So, the consumer—do they really know what they're getting?

This ambiguity forces both companies and governments to make decisions about what to include in anti-CAT policy. Although certification programs attempt to clarify these nuances, the majority (81.1%) of companies with anti-CAT policies do not actively hold certifications, resorting to their own standards. This challenge gave rise to the categorization system I used to sort companies despite these inconsistencies (Table 1). Without shared standards or enforcement mechanisms, the ability of both sectors to fully respond to public demands for CAT bans is challenged. While companies can use this flexibility to their advantage, it presents complex questions that delay legislative bodies in enacting policy.

Governments face greater obstacles in banning CAT, inhibiting legislative responsiveness to public controversy. Gracie reminds us, “Anything will take time. Nothing happens overnight.” Legislative policymaking requires navigating political system barriers and reaching consensus across a wide range of stakeholders. This is a time-consuming process, adding further context as to why governments generally move slower than corporations. Even after policies are passed, governments frequently rely on phased-in or regional approaches, deferring national bans.

Delayed legislation across international markets impedes the progress of companies, as some markets continue to require CAT under law. Finally, the lack of a universal definition for what constitutes a CAT ban yields complexity. While this ambiguity gives corporations more flexibility, it hinders governments from implementing bans efficiently. These factors help explain why governments, despite strong public support for reform, have not moved as quickly as the corporate sector.

Discussion

My initial research question sought to identify which sector—corporate or legislative—has responded more rapidly to rising public controversy over cosmetic animal testing (CAT), as well as the drivers and inhibitors behind their respective policy movements. My findings suggest that corporations have been more *efficient* in banning CAT, moving faster than governments in adopting anti-CAT policies—particularly in the earlier stages of this movement. The timeline analysis shows earlier initial progress and a consistent lead in corporate policy adoption (Level 3) over the three-decade period, while legislative progress remained limited until the EU-wide ban in 2013. However, this does not mean that corporations are more *effective* in banning CAT. Although companies acted earlier, the strictest corporate bans (Level 1) remain relatively rare, especially among larger companies. Several interviewees argued that legislation is more powerful in ending CAT, as it applies across entire markets and forces lagging companies to comply. The distinction between efficiency and effectiveness challenges the interpretation of responsiveness and the theory's application.

While Dahl's Responsiveness Theory provides a useful lens to conceptualize how changes in public opinion lead to changes in policy, its explanatory power is limited in this context. The theory uses public opinion as a dominant driver of policymaking but fails to

consider other factors. Corporations face external drivers, such as cost-saving opportunities, moral leadership, and scientific innovation, pushing them to adopt CAT bans. This challenges the application of this theory to corporations, as Dahl originally developed this framework to understand democratic policymaking. On the other hand, governments face structural and political inhibitors, creating a gap between political will and policy action. Dahl's theory fails to account for these inherent obstacles in responding to public opinion. Dahl uses an idealized lens for how institutions should function in theory, rather than accounting for the realities of challenges in policymaking. Delays in legislative implementation further demonstrate how responsiveness, as defined by policy adoption, may not reflect real-world policy enforcement. These factors reveal how responsiveness is not simply a function of public opinion but is shaped by the practical realities of policymaking in both sectors.

Moreover, the policymaking processes of corporations and governments are fundamentally different. Companies have greater autonomy to enact policy to whichever degree (level) they choose and do not need to disclose clarifying details. They can adopt policies at any time and often without oversight, allowing them to respond quickly to shifts in public opinion. However, this autonomy creates inconsistency across firms and makes it difficult to assess or compare their policies. In contrast, governments are held more accountable by stakeholders and must undergo legal procedures, which slow down action but produce enforceable outcomes. Thus, while corporations move faster, legislative action may offer a more reliable path toward reform.

Limitations

The findings of this study have several limitations. Within my timeline analysis, there are inherent differences between the companies and countries included, limiting the comparative

conclusions I could draw. For example, the market capitalization and nominal GDP figures have very different scales and ranges (Appendix B). My study does not control for economic size between sectors. The weighted illustration of progress (Figure 2) introduces additional limitations. It assumes that market capitalization and nominal GDP accurately represent the economic significance of each ban within the cosmetics market. I included this weighted analysis to explore how progress may appear differently when scaled. This provided added context surrounding the implementation of these bans. However, this weighting limits the ability to make cross-sector comparisons. Since weighting did not significantly change the overall representation of legislative progress, I primarily used it to gain insight within the corporate sector. Because my analysis included companies with a wide range of market capitalization values, accounting for these weights helped separate large companies from smaller ones, revealing how economic size may influence the appearance of corporate progress. Providing both unweighted and weighted timeline illustrations allows readers to consider both lenses. Furthermore, my timeline analysis excluded state-level and brand-level policies. This approach ensured consistency but may paint an understated account of progress.

Within my corporate research, I relied on publicly available data. Many companies may have internal CAT-related policies that were not accessible, potentially underrepresenting progress in this sector. However, my research focused specifically on publicized policies, which are more relevant under the Responsiveness Theory framework, as they reflect a company's relationship to the public. Another limitation was ambiguity in corporate policy language, which made my classification between Levels 1 through 3 somewhat subjective. There may have been cases in which a company changed their policy between levels, for example, which I was unable to account for. I only considered a company's most recent CAT policy and its adoption year.

Once the most recent CAT ban was put in place, I assumed it remained unchanged. I also had to estimate the adoption year of some corporate bans. These limitations may have introduced minor inaccuracies in the timeline, though they should not substantially affect the overall findings.

Additionally, my interviews are limited to the knowledge and perspectives of advocacy leaders. Their views may not fully reflect those of corporate or legislative policymakers, especially on a global scale. One might argue that interviewing policymakers directly would introduce less bias. However, gathering insights from advocacy leaders offered a more balanced perspective between companies and governments. These interviewees were able to reflect on their experiences working with both sectors, helping me better understand the relationship between them. They also brought extensive expertise in the niche topic of CAT, more so than policymakers, who typically deal with a wider range of issues, might have been capable of. One persistent limitation is the overrepresentation of North American and Europe-based perspectives. As a result, some insights may apply primarily to those regions. The global scope of my timeline analysis may partially offset this limitation. Overall, my two-fold methodology helps fill in some of the blind spots introduced by these constraints. Finally, my interviews were conducted with eight advocacy leaders, offering depth but limited breadth. However, there are relatively few organizations globally that focus on CAT, and my interviews represented seven of them. In many cases, interviewees were the top point persons at each organization, making their insights highly valuable.

Future Research

While my study addresses, with some limitations, the efficiency of corporate and legislative policy in banning CAT, further research could explore the efficacy of these policies. While some of my interviewees made assumptions that legislative policy has more real-life

impact than corporate policy because it captures an entire market, this assumption could be challenged. For instance, another question to ask might be: how does a corporate ban versus a legislative ban effect the occurrence of CAT, controlling for factors such as size? This would help us better conceptualize the real-world progress of these bodies and offer clearer guidance to advocacy leaders on the most effective strategies.

Additionally, this study focuses on the year that new policies are put in place but does not measure the time it takes for companies and governments to create policy once this process is initiated. We know that it often takes years for legislators to reach agreement on public policies, but this planning process happens behind closed doors within companies. Instead, I was able to make inferences from my interview findings that corporations do not face the same scale of challenges that governments do in passing legislation, and my timeline analysis shows that some corporations passed internal policies before any legislative policies. However, if a study could overcome this information gap and measure the amount of time it takes for corporations to pass policies once discussions begin, this insight would be valuable.

Next, it is unclear whether my findings would be consistent in other issue areas that are subject to both corporate and legislative policy. The interplay between these two bodies is particularly relevant within the topic of corporate social responsibility (CSR), which includes animal welfare and environmental impact concerns. Future research might explore whether corporations are more agile in developing other CSR-related policies before being subjected to by regulations. This could also shed more light on the role of public opinion in shaping these timelines. What happens with issues where public consensus is less uniform? Other research designs can be used to address questions that arise from this study.

Policy Recommendations

In terms of corporate policy, companies should be more transparent in their disclosed CAT policies. This would allow consumers to make more informed purchasing decisions that align with their values. While a few certification organizations have aimed to resolve this lack of transparency, public policy can step in to require companies to share explicit details of their CAT-related activities, especially for those companies that don't fit the traditional "cruelty-free" definition made by these organizations. It is apparent through my timeline analysis that, as of 2024, most companies still do not disclose their stance on CAT (Figures 1 and 2). If a company did engage in CAT, they were very unlikely to disclose that information voluntarily. Thus, it is unclear to what degree (i.e., raw materials, finished products, third-party) they engage in CAT, or if they fall into Levels 1-3 (Table 1). It is also highly possible that these companies do not actively track this information themselves. Legislative regulation can force these companies to track and divulge this data. In general, many argue for the improvement of CSR-related public disclosures (Hazen 2020; Krueger et al. 2024), and CAT is no exception.

To successfully terminate CAT, given that it is now widely viewed as outdated, governments should prioritize ensuring that no regulations actively require CAT. My findings suggest that corporations are sometimes held back by these regulations, such as in China or the US sunscreen market. Next, governments should work with stakeholders to reach an agreement on a CAT ban that works for all stakeholders involved. Thorough review and negotiation can ensure that these bans work as expected in the implementation stage. While my findings show that the legislative process can take years, it is important for these legislators to recognize that they are all on the same team. Many advocacy leaders noted that this was a change that virtually everyone wants to see—once informed on the topic—and acknowledging this can fuel progress.

Now that many countries have banned CAT, other countries can look at the legal structure and considerations made by these existing laws to inform their policymaking. This can make the legislation process more efficient. With the exponential increase in feasibility to generate these policies, countries across the globe can work to eliminate CAT.

Conclusion

This study finds that companies respond more rapidly than governments to rising public opposition toward cosmetic animal testing (CAT). As evidenced from a timeline analysis of legislative and corporate progress in banning CAT, companies were first to implement bans and, over time, have demonstrated broader adoption of general anti-CAT policies. Interviews with advocacy leaders further reveal the dynamics behind this progress. Corporate responsiveness is driven by rising public controversy, organized campaigns, the development of alternative models, internal incentives, and a greater level of autonomy. At the same time, legislative responsiveness is hindered by structural and political challenges. These insights help explain why corporations appear to be more efficient in banning CAT, but it does not speak to the effectiveness of these types of policies.

This study addresses the gap in the literature examining corporate policy alongside legislative policy in the cosmetic animal testing reform space. Furthermore, this research highlights the interplay between these sectors, showing that progress in one can influence and enable change in the other. Both governments and companies are essential players in the race to eliminate cosmetic animal testing globally. Both have made significant strides over the past three decades. While it may appear that corporations are winning this race in terms of speed, these two policymaking bodies should not be seen as rivals—but rather as teammates working towards a shared goal.

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Appendix

Appendix A: Interviewees

Pseudonym	Role	Experience level	Organization Size	Legislative advocacy work?	Corporate advocacy work?
Gracie	Correspondent	Low	Large	Yes	Yes
Bridget	Training Specialist	Medium	Medium	Yes	Yes
Giselle	Topic Director	High	Large	Yes	Yes
Krista	Science Advisor	Medium-High	Medium	Yes	Yes
Eleanor	Policy Manager	High	Medium	Yes	No
Alex	Correspondent	Low	Large	Yes	Yes
Jen	Organization Director	High	Small	No	Yes
Sophia	Public Affairs Director	Medium-High	Medium	Yes	Yes

Appendix B: Legislative and Corporate Data Summary

	Nominal GDP (Countries)	Market Capitalization (Companies)
Mean	$524,057,272,149	5,775,581,344.21
Median	$41,099,659,295	98,105,864.50
Standard Deviation	2.3993E+12	33,065,964,531.70
Maximum	$27,720,700,000,000	389,221,952,605.86
Minimum	$62,280,312	1,457,791.71
IQR	$244,397,888,262.25	655,831,278.61521

Appendix C: Corporate Global Presence

Country of Headquarters	Count
Korea; Republic (S. Korea)	46
Japan	30
China	24
United States of America	17
India	11
Taiwan	8
Hong Kong	6
United Kingdom	6
Indonesia	6
Thailand	6

Australia	5
Poland	5
France	3
Bulgaria	3
Malaysia	2
Brazil	2
Saudi Arabia	2
Bangladesh	2
Sweden	2
Pakistan	2
Italy	2
Belgium	1
Switzerland	1
Latvia	1
Germany	1
Mauritius	1
Norway	1
Sri Lanka	1
Nigeria	1
Greece	1
Cayman Islands	1
Total Companies	**200**

Appendix D: Interview Questions (semi-structured):

- Could you please describe your role and experience?
- Could you please describe your organization's goal?
    - Does your organization focus on putting pressure on corporations or governments, or both—and why?
- From your perspective, are your organization's efforts more effective toward corporations or governments?
- What is your favorite success story?
- What is your perception of the responsiveness of corporate and legislative policy (clarify if needed)?
- Is there anything else you want to share that you have not had the chance to share?

Appendix E: Comprehensive list of analyzed companies (in descending order by Market Capitalization):

Procter & Gamble Co, L'Oreal SA, Unilever PLC, Colgate-Palmolive Co, Kimberly-Clark Corp, Kenvue Inc, Beiersdorf AG, Estee Lauder Companies Inc, Galderma Group AG, Kao Corp, Essity AB (publ), Unicharm Corp, Godrej Consumer Products Ltd, Dabur India Ltd, Giant Biogene Holding Co Ltd, Shiseido Co Ltd, Coty Inc, AmorePacific Corp, Proya Cosmetics Co

Ltd, Interparfums Inc, LG H&H Co Ltd, Hengan International Group Company Ltd, Natura &Co Holding SA, Emami Ltd, Kobayashi Pharmaceutical Co Ltd, Kose Corp, Yunnan Botanee Bio-Technology Group Co Ltd, Pola Orbis Holdings Inc, Harbin Fuerjia Technology Co Ltd, Shanghai Chicmax Cosmetic Co Ltd, Guangdong Marubi Biotechnology Co Ltd, PALTAC Corp, Edgewell Personal Care Co, Shanghai Jahwa United Co Ltd, Intercos SpA, Chongqing Baiya Sanitory Products Co Ltd, Cosmax Inc, APR Co Ltd, Pigeon Corp, Al Majed for Oud Company SJSC, Olaplex Holdings Inc, Noevir Holdings Co Ltd, Kolmar Korea Co Ltd, Rizap Group Inc, Hangzhou Haoyue Personal Care Co Ltd, VT Co Ltd, Gr Sarantis SA, Arata Corp, Ontex Group NV, Milbon Co Ltd, Polo Queen Industrial and Fintech Ltd, SYoung Group Co Ltd, Marico Bangladesh Ltd, MINGCHEN HEALTH Co Ltd, Tianjin Yiyi Hygiene Products Co Ltd, Warpaint London PLC, MTG Co Ltd, Hyundai Bioscience Co Ltd, PZ Cussons PLC, Shanghai Aiyingshi Co Ltd, Liuzhou Liangmianzhen Co Ltd, Hangzhou Coco Healthcare Products Co Ltd, Mandom Corp, Cosmecca Korea Co Ltd, Lafang China Co Ltd, Karmarts PCL, Fujian Green Pine Co Ltd, Cota Co Ltd, NU Skin Enterprises Inc, Yatsen Holding Ltd, Bajaj Consumer Care Ltd, Perfect Group Corp Ltd, Tongling Jieya Biologic Technology Co Ltd, Ya-Man Ltd, Chlitina Holding Ltd, Victoria Care Indonesia Tbk PT, I-ne Co Ltd, C&C International Co Ltd, Clio Cosmetics Co Ltd, Aekyung Industrial Co Ltd, China Boton Group Co Ltd, Beauty Health Co, DR.Wu Skincare Co Ltd, Manyo Factory Co Ltd, Artnature Inc, It's Hanbul Co Ltd, Norbel Baby Co Ltd, S & J International Enterprises PCL, Hankook Cosmetics Manufacturing Co Ltd, Bon Fame Co Ltd, Shiny Brands Group Co Ltd, Natural Beauty Bio-Technology Ltd, NeoPharm Co Ltd, Able C&C Co Ltd, KNH Enterprise Co Ltd, Genic Co Ltd, Dr Miele Cosmed Group SA, Kino Indonesia Tbk PT, Tonymoly Co Ltd, Big Tree Cloud Holdings Ltd, Englewood Lab Inc, Hyundai BioLand Co Ltd, Maywufa Co Ltd, FCW Holdings Bhd, Bogart SA, Raphas Co Ltd, Jourdeness Group Ltd, Asian Phytoceuticals PCL, Almado Inc, Zero to Seven Inc, Do Day Dream PCL, Monalisa Co Ltd, Ming Fai International Holdings Ltd, Axxzia Inc, Luo Lih Fen Holding Co Ltd, Coreana Cosmetics Co Ltd, CTK Co Ltd, Bbia Co Ltd, PZ Cussons Nigeria PLC, Liberta Co Ltd, Path Corp, Ark Solutions Inc, Shobido Corp, Premier Antiaging Co Ltd, GFC Life Science Co Ltd, Haba Laboratories Inc, Bonne Co Ltd, Adjuvant Holdings Co Ltd, MADARA Cosmetics AS, Keya Cosmetics Ltd, 4Mass SA, Culti Milano SpA, AXIL Brands Inc, Fu Burg Industrial Co Ltd, HuM&C Co Ltd, CSA Cosmic Co Ltd, Coloray International Investment Co Ltd, Leaders Cosmetics Co Ltd, Aqua Bio Technology ASA, Advance ZincTek Ltd, Mundial SA Produtos de Consumo, NFC Corp, BeautySkin Co Ltd, C'Bon Cosmetics Co Ltd, SR Biotek Inc, McPherson's Ltd, Outin Futures Co Ltd, Soiken Holdings Inc, Intelligent Oud for Trading SJSC Co, Sewha P&C Inc, Creightons PLC, Medience Co Ltd, Khemani Distributors & Marketing Ltd, Estee Gold Feet PT Tbk, TS Trillion Co Ltd, NowCos Co Ltd, Moong Pattana International PCL, JHS Svendgaard Laboratories Ltd, BaWang International Group Holding Ltd, Mauritius Cosmetics Ltd, NordMason Co Ltd, Organic Tea Cosmetics Holdings Co Ltd, Multi Indocitra Tbk PT, Jincostech Co Ltd, Globon Co Ltd, Nippon Shikizai Inc, Brand Architekts Group PLC, Pharmena SA, InnoGene Co Ltd, Jayjun Cosmetic Co Ltd, KMPharmaceutical Co Ltd, Successmore Being PCL, Rajnish Wellness Ltd, Lavena

AD, Takbo Group Holdings Ltd, Miraculum SA, Ivy Cosmetics Corp, Aroma AD, Eng Kah Corporation Bhd, Swadeshi Industrial Works PLC, Harper Hygienics SA, Mustika Ratu Tbk PT, La Savonnerie de Nyons SA, Martina Berto Tbk PT, Zoono Group Ltd, ZIL Ltd, Bulgarska Rosa AD, CCA Industries Inc, Stephan Co, Shield Corp Ltd, Paramount Cosmetics (India) Ltd, Anagenics Ltd, Novateor Research Laboratories Ltd, CEL AI PLC, Skin Elements Ltd, Power FulX Co Ltd, Shonghoya Intl Group Inc, Regalworks Media Inc, Ador Multi Products Ltd, NOSIUM AB (publ