THE WOLVES ARE GUARDING THE COW PASTURE: EXAMINING THE U.S. DAIRY INDUSTRY'S CONTROL OVER THE FEDERAL GOVERNMENT

By

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Author's Declaration

I, the undersigned Benjamin Levi DeVore hereby declare that I am the sole author of this thesis. To the best of my knowledge this thesis contains no material previously published by any other person except where proper acknowledgement has been made. This thesis contains no material which has been accepted as part of the requirements of any other academic degree or non-degree program, in English or in any other language.

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Abstract

While the dairy industry in the U.S. has maintained a strong influence on federal policymaking since at least the 19th century, their arsenal of lobbying tools has only grown over the past few decades. The industry's unyielding strength is somewhat surprising given the multidimensional levels of criticism directed at the industry recently, including from economic, health, and environmental perspectives. This thesis aims to answer this apparent contradiction by examining three external aspects of lobbying influence—the revolving door phenomenon, political donations, and industry-funded nutritional studies—in addition to deep-seated conflicts of interest present within the USDA.

Specific mechanisms for each of these factors has allowed the dairy industry to dominate in Washington, displayed by their advocate strength, financial superiority, and research prowess. Over time, this has resulted in a federal government that largely views pro-dairy regulations and legislation as the default position.

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List of Abbreviations

USDA United States Department of Agriculture

DHHS Department of Health and Human Services

NDC National Dairy Council

Introduction and Research Design

The dairy industry's lobbying strength in the U.S. has been widespread and robust for at least the past 150 years. When butter's primary substitute margarine became available to the general public in the 1870s, the dairy industry initiated intense lobbying efforts on state and federal levels, through legislative and judicial means, to ensure that butter maintained its market dominance. This strategy constituted one of the first explicit industry campaigns to persuade the federal government to prioritize their product over its rival's, thus becoming a precursor to the modern normalization of special interest-infused politics (Miller 1989).

Concurrent with the lobby's direct appeals to policymakers was a concerted propaganda campaign against margarine's supposed poor sanitation and negative health side-effects, with claims suggesting that margarine was partly made from dead animals and caused a range of symptoms like indigestion and even cancer. This disinformation campaign succeeded: one committee in the U.S. House of Representatives declared margarine as "detrimental to the public health, being the fruitful cause of dyspepsia and other diseases" (Ibid), and the U.S. Congress eventually passed the Oleomargarine Act of 1886, which levied the first tax on a food product in the nation's history (Mickle 1941).

A century and a half later, close observers of the modern dairy lobby would likely notice several commonalities with its ancestral form: a relative ability to punch above its weight, a diversified set of tactics that collectively aim toward a common purpose, and potentially unscrupulous practices, all in an effort to boost the reputation of dairy products. The outcome of these contemporary strategies is likewise effective—federal policymakers provide billions of dollars in subsidies to dairy farmers yearly, oversee semi-public entities that overtly promote the increased consumption of dairy products, and accept significant campaign contributions from the industry in implicit exchange for political support.

Given the transformation of the dairy industry since the late 1800s, which has included serious political, economic, social, and environmental upheavals that each threaten to upend the industry's lobbying preeminence vis-à-vis federal policymaker influence, the obvious question is why—are there unique characteristics or strategies that have allowed this lobbying industry to remain dominant?

The answer must partly reside in the institutional role that the dairy industry amassed in its early days, both in terms of early industry coalition-building and the sudden ubiquity of milk and other dairy products in American households. Propelled by advancements that included mandated milk pasteurization, safety inspections, and factory-made dairy products, the consumer's desire for milk and other dairy products was also influenced by a proliferation of industry advertisements that heralded its benefits (Wiley 2014). This marketing strategy, in addition to the associated familiarity of the milkman, whose presence was universal by the 1920s, made a substantial, lasting impression (Novak 2012). By the mid-1940s, dairy reached its consumption pinnacle in the U.S.: Americans drank approximately 40 gallons of milk and ate close to 25 pounds of ice cream per year (Putnam and Allshouse 2003).

A series of industry reforms initiated by the federal government, some at the behest of the nascent dairy lobby and others a consequence of fortuitous timing, similarly set in motion the emergence of the contemporary dairy behemoth. Congress passed the Capper-Volstead Act in 1922, allowing the dairy industry to "act together in associations" for various purposes like processing organization, market preparation, and milk marketing schemes (Erba and Novakovic 1995). A more unified industry gave them added clout during the turmoil of the Great Depression as a considerable amount of federal aid was delivered to struggling industries. This included the First Milk Marketing Orders of 1937, which formed a bedrock type of policy that allowed the federal government to modify and manipulate dairy prices by regulating quantities produced (Bolotova 2016). The ramifications of this aid policy are still intact in current subsidy formulas, including complex milk margins that heavily regulate production levels and corresponding prices. Most importantly, the law made the federal government and the dairy industry indefinitely intertwined.

The honeymoon phase for the dairy industry undoubtedly came to an end in the 1970s as a proliferation of external and internal pressures made them increasingly susceptible to scrutiny. On the health front, a steady rumbling commenced in the late 1960s that questioned problematic effects of excess dairy consumption. This came to a head with Senator George McGovern's influential 1977 congressional report that signaled warnings on the dangers of saturated fat and cholesterol, both of which are found in dairy products (Senate Select Committee on Nutrition and Human Needs 1977). The introduction of artificial bovine growth hormones into dairy cows and feed in the 1990s prompted more controversy based on inconclusive evidence raising the possibility of its increased cancer risk (Renehan, et al. 2004). Modern uses of antibiotics for cow development have also raised major health concerns from scientific experts and the public (Hao, et al. 2014). Moreover, fundamental nutritional beliefs about dairy, such as its ability to strengthen bones and reduce the chances of osteoporosis, have also been disproven (Feskanich, et al. 1997).

Perhaps unsurprisingly, consumer tastes have shifted significantly in the last few decades, with milk declining as a percentage of the market share both domestically and internationally. Soft drink sales in the U.S. eclipsed those of milk in the mid-1970s, and the additional competition of bottled water and plant-based milks only compounded the problem. Retail sales of milk are expected to decrease by 27% between 2013-2023, and while the increased popularity of cheese does make up for some of these losses, it cannot fully recuperate the industry's downturn (Barrett and Higgins 2020).

One last significant evidence of the industry's modern struggles relates to the sudden demise of dairy farms. Between 1970 and 2017, 94% of all dairy farms in the U.S. went out of business (McCausland 2018). Besides the decrease in overall demand for dairy products, the reasons behind this trend are multifaceted in nature: mercurial pricing systems, unforgiving consequences for small farms not attaining economies of scale, and shrinking international markets as a result of ongoing trade wars with China (Barrett 2020).

Altogether, these harmful developments would logically portend a more fragile industry because of the onslaught of varying existential threats. In terms of federal policy influence, this might result in the industry having diminished leverage among key criteria of lobbying success: policymakers not prioritizing dairy issues, lobbying groups shrinking as a presence in Washington, and political donations trending downward over the past few decades. On all three of these measures, the opposite has in fact occurred. In 2019, a bipartisan group of eight U.S. senators introduced legislation to disallow plant-based milk alternatives from using the word "milk" and other dairy-related terms (DAIRY PRIDE ACT 2019). Dairy lobbyists have spent at least $6 million yearly in Washington since 2011 (the industry had never collectively spent $5 million or more until 2010), and over ten dairy associations spent at least $100,000 in 2019. Lastly, individual campaign contributions from the dairy lobby have increased from three to five million dollars over the course of the last three presidential campaign cycles (Center for Responsive Politics n.d.).

The apparent inconsistency between the dairy industry's multiple struggles and their continuing strength in federal lobbying raises the key question of this thesis: in what specific ways does the dairy industry hold on to their privileged position in federal policymaking?

My thesis will explore the dairy industry's influence through the framework of regulatory capture theory. This theory seeks to explain the corruption of overwhelming influence, in this case through purely legal means, that takes place when any political actor—legislator, regulator, court, or even an entire entity such as a federal agency or congressional committee—effectively serves an additional role in advancing the business and political interests of a particular constituency like a private industry (Bó 2006). In particular, I will explore how three mechanisms of regulatory capture—information asymmetry, a geographically dispersed dairy constituency, and cognitive capture—enable policy success through the more concrete mediums of policymaker-lobbyist 'revolvers,' political donations, and industry-financed nutrition studies, respectively. The following chapter will provide a brief history of regulatory capture theory before launching into more detail of these specific regulatory capture mechanisms. Next, a more explicit case will be made for why studying this particular area is important, and the central argument will be elaborated more extensively.

For the next three analytical chapters, there will be a focus on the aforementioned points of influence that promote the dairy lobby's prominence. The first, pertaining to the revolving door phenomenon, will primarily rely on media accounts to investigate the conduct of five policymakers from different parts of the federal government who have each participated in this type of relationship. Next, I will explore contemporary political donations to congresspeople, demonstrating the direct and dispersed influence that such contributions have on policymakers. Specific lobbying groups, trends, monetary amounts, and recipients will mostly be evaluated from the Center for Responsive Politics, which is the *de facto* organization for collecting such information.

The final chapter of this section will take a close look at the trend of industry-funded nutrition studies that promote pro-dairy stances. A number of studies will be examined, with particular focus on a researcher who was paid by the dairy industry for over a decade to examine the connection between dairy consumption and weight loss in the hopes of eventually influencing government policy.

The seventh chapter will scrutinize the inherent conflict of interest present within the USDA. I will argue that this in effect constitutes a defective mandate, which is an extreme form of regulatory capture. Recent exposés from the media in addition to a more formalized report entitled *Whitewashed: How the Industry and Government Promote Dairy Junk Foods* will serve as my primary source materials for this section. Finally, I will conclude by discussing potential ways that dairy's widespread regulatory capture can be moderated moving forward, including limitations and opportunities from both political and economic perspectives.

Literature Review

Although coercive, overwhelming forms of persuasion by business interests have undoubtedly been a feature of state governance for as long as functioning governments have existed, the academic conceptualization of this idea only took root in the second half of the twentieth century. Influenced by Pigouvian notions of welfare economics and government benefits aimed foremost at the public good (Pigou 1932), leading regulation scholars ascribed to the public interest theory; they generally believed that on the whole, policymakers primarily formulated and implemented policies to better serve the interests of the citizenry at large (Meade 1949, Wheless and Lewis 1951). This was greatly influenced by interventionalist policies from the federal government in the aftermath of the Great Depression that sought to directly assist unemployed citizens.

By the late 1960s, however, a more conservative group anchored in the ideology of the Chicago School of Economics turned this general theory on its face. Perhaps the most prominent voice among this cohort was George Stigler, who in 1971 published the seminal work on regulatory capture theory, *The Economic Theory of Regulation*. In it, he used earlier writings on the power of collective actions to elaborate on the main levers influencing government decision-making (Olson 1965). Specifically, he argued that "regulators" must constantly confront pressures from both special interests ("producers") and public interests ("consumers"). Because of the more concentrated organizational capacity of special interests, which contrasted with a diffuse electorate that was invariably disunified, the producer side would always be prioritized. This resulted in a model that would largely replace public interest theory: regulators worked for the interests of large corporations and industries and not for the public at large (Stigler 1971).

Following Stigler's treatise, a flurry of academics signaled their acceptance of this new approach called public choice or capture theory (Posner 1974, Peltzman 1976). Others attempted to elucidate ambiguities and create nuanced divergences that painted a more wholistic picture. Stigler's idea of a regulator was all-encompassing in nature, resulting in a black-box visualization that surely could not account for the varying types of policymakers and their corresponding responsibilities.

For instance, elected legislators could surely not be swayed by business interests in the same manner as executive bureaucrats because of their closer ties and dependencies from respective constituencies. In the U.S., winning re-election ordinarily requires both a majority of votes from the public in addition to financial donations from business interests. As a result, their unilateral attentiveness to private industries may not be as strong as Stigler implied, and such legislators instead must often juggle a balancing act to maximize their chances of staying in office (Peltzman 1976). Many of the early public choice proponents approached policymaker decisions through an overly mechanistic perspective, thereby stripping policymakers' individual agency away. In real governmental settings, this assumption is likely to not always be true.

Later public choice advocates began to offer general pathway predictions that considered these more human elements of choice. First, the chance of regulators becoming captured increases substantially when an issue is obscured from the public, such as when the policy area is too complex, irrelevant, or intentionally hidden from most people. Unlike earlier assumptions, a circumstance like this does not automatically result in regulatory capture occurring. Instead, executive regulators or legislators still have degrees of autonomy in their decision-making, even if corporate interests are the only bodies involved with trying to influence a specific policy area (Levine and Forrence 1990).

With these central features of regulatory capture in mind, it is important to examine the concrete mechanisms that powerful business interests use to coerce policymakers into prioritizing their agendas. While not necessarily exclusive to business influences on government, a major consequence of sustained, long-term, and mostly one-sided pressures is that of cognitive capture. The concept, which has been identified and developed by many scholars (Kwak 2014, Langbein 2010, Solomon 2010), theorizes that interest groups gradually take over legislative and administrative processes by the "creeping colonization of ideas" (Engstrom 2013). Over time, the decision-making that underlies such processes and evaluations shifts to mirror the mindset of the companies themselves, and policymakers thus view their actions through the same perspective as those pressuring industries.

Another broad form of how these interactions ensue is through the continuous transmittal of asymmetric information. Business interests communicate a deluge of position papers, policy briefs and memoranda, recommendations, and other pieces of information to executive agencies and legislators (Wagner 2010). Such activity presumably contrasts with public interest groups and private citizens who may not have the financial or logistical capacity to act in a similarly effective manner. Studies have corroborated this asymmetric contrast in information: an analysis of federal lobbying disclosures in 1995 found that from a random sampling of 137 policy issues, only 15 interest groups participated in the median policy area, and only eight issues involved more than 300 interest group contributions. Moreover, the typology of lobbying groups displayed a "tremendous predominance of business firms in the Washington lobbying population" (Baumgartner and Leech 2003). This finding has been confirmed in later studies as newer technological methods of lobbying information have emerged (Furlong and Kerwin 2005, Schlozman and Burch 2009).

There are several additional mechanisms that stimulate private industries' persistent preferential treatment in Washington. The revolving door phenomenon is a prominent example. This questionable process refers to the tendency of policymakers to work for private sectors that they used to regulate, and it is prominent throughout most government agencies and private sectors (Draca 2014). While it remains an exceedingly common and mostly legal practice, significant conflicts of interest issues are apparent.

The revolving door phenomenon generates potential benefits that are mutual between the policymaker and their new employer. Studies have shown that former government employees can profit tremendously, especially when they still have influential connections working in Washington (Vidal, Draca, and Fons-Rosen 2012). The hiring of policymakers, particularly former members of Congress, chiefs of staff, and high-level executive agency leaders, can increase the stock prices for these businesses (Luechinger and Moser 2014). Such dynamics are highly problematic for logical reasons: executive or legislative officials will often have an impetus for favoring certain industries because they either a) hope to one day work for companies or lobbying associations in that sector or b) have previously worked for that industry and therefore have a pre-existing bias in favor of their interests (Croley 2010). These ulterior motives could prompt officials to make decisions that are contrary to the relevant facts or public interest as a result of these partialities.

Although this phenomenon receives ample media coverage when high-profile government officials assume jobs as lobbyists or industry advisors once they leave office, the revolving door phenomenon is certainly not exclusive to congresspeople or cabinet secretaries. It is rather pervasive throughout all levels of government, including lowly legislative assistants in Congress and low to mid-tier executive agency bureaucrats (LaPira and Thomas 2017). Such ubiquity makes the practice extremely normalized and oftentimes even expected within Washington's political culture.

Another mechanism that can create conditions for regulatory capture is with the influence afforded to private industries through political donations, which is most relevant for elected legislators (although not exclusively—for instance, certain agency officials may have previously been legislators and have a predisposition for hearing the interests of those industries that donated to them before). Perhaps surprisingly, academic literature has not convincingly shown that political donations have a direct correlation to policy outcomes. However, a growing body of scholars contend that such measures have been difficult to link because of the insidious nature of political donations where subtler processes of policy formulation and development are better indicators than policy outcomes (Lessig 2011, Hasen 2012, Hall and Wayman 1990). A recent analysis of campaign contributions throughout all U.S. state legislatures concluded that the influence from donations is likelier to appear early in the legislative process, when detailed actions on aspects such as the wording, insertion, or deletion of texts in the legislation can be accomplished without media scrutiny or public knowledge (Powell 2012). At the very least, it is reasonable to assume that policymakers are often more inclined to hear from groups that have donated to them in the past compared to those that have not.

One last precipitator of regulatory capture that is less common than the other lobbying pressures is the case of an executive agency's defective mandate. This scenario, which can occur from the beginning of an agency's existence or morph into such a form as it evolves, happens when an industry's core interests are in direct alignment with the mission of the agency that regulates it (Baxter 2011). In other words, this "failure" to prioritize the public interest is "pre-ordained [as] it is built into an agency's mandate" (Shapiro 2011). While the interests of the industry in question and the public may be similar from the perspective of the agency, it nonetheless presents an inherent conflict of interest since these bifurcated interests may diverge as varying contexts change.

Of course, certain key elements of regulatory capture theory have been problematized, and some of these questions are important to note throughout the subsequent analysis. To begin with, despite a widespread assumption of what "public interest" entails, especially when contrasted to the interests of powerful business interests, there remains a considerable degree of debate surrounding its definition: who exactly does it refer to? Is it universal in nature? Is it simply temporal, shifting according to which political party is in power (Engstrom 2013)? Additionally, some have argued that it is simply a strawman concept that public choice theorists used to develop their own model (Carpenter 2010). This definitional prodding is extremely helpful, and the analysis that follows will take a more all-encompassing viewpoint, considering the public interest to be any and all needs or preferences from non-industry segments of the population, regardless if they are in line or opposed to official industry desires.

Finally, regulatory capture is neither a self-fulfilling prophecy nor an inevitability across all government bodies and time. This idea informs recent counterapproaches to the public choice model and contests the more conservative viewpoint that less government intervention is needed since it remains impossible to disentangle regulation from captured agencies or policymakers (W. J. Novak 2013). Indeed, the diversifying make-up of lobbying forces in Washington does somewhat diminish the idea of an unyielding unification between government and large private interests. For example, advocacy groups that explicitly lobby for certain public interests, such as Planned Parenthood, the National Education Association, and the Environmental Defense Fund, each operate multi-million-dollar budgets in Washington and have effectively countered industry influences in various respects.

Despite these optimistic signs that point toward a more level playing field between private and public interests, the dynamics at play within the dairy industry in regard to regulatory capture remain incredibly strong.

Argument and Purpose

My thesis will analyze the dairy industry's successes in affecting federal policymaking decisions through the framework of regulatory capture theory. Such manipulation is rarely endorsed or broadcasted in an explicit manner, and it often occurs through a complex web of relationships that involve legislators, regulators, and commercial stakeholders. Moreover, the processes that constitute a captured entity are often so engrained into bureaucratic procedures and accepted by the body politic that even those who are actively complicit in its continuation are not fully aware of the consequences inherent in their routine actions.

Perhaps this dynamic is most well-known within the academic and cultural zeitgeist in relation to the military-industrial complex, a term that generally describes the mutual dependence of the U.S. military and the defense manufacturing industry. Before President Eisenhower's farewell address in 1961 that specifically warned of the dangers in this relationship, academics had already conceptualized the theory through close observations 14 years prior (Riefler 1947). Similar types of capture have subsequently been detected and analyzed, including large pharmaceutical companies' priority status with the Food and Drug Administration as well as Wall Street's close ties to the Treasury Department and the Federal Reserve Board (Hayes and Prasad 2018, Igan and Mishra 2014).

The primary reason for studying the dairy industry is its current research gaps: despite the fact that the dairy industry created a more consolidated lobbying structure before most other groups, it has received virtually no attention from scholars in the field of regulatory capture. While New York University professor Marion Nestle has notably written many works over the years that examine aspects of the dairy industry's lobbying power, they have mostly been historical narratives that target specific episodes, such as the controversial reneging of the USDA's food pyramid in 1991 as a result of dairy lobbying (Nestle 1993). Yet no academic work to my knowledge has approached the dairy lobby specifically through the theory of regulatory capture nor in a manner that provides a more comprehensive analysis of the main modes in which this lobbying influence has manifested itself. The ultimate aim of this thesis is to closely examine the independent variables that allow for dairy's successful and persistent regulatory capture.

My argument is that their strategies prove to be successful because of three main external factors. First, the dairy industry has employed an abundance of lobbyists who previously worked in nearly all sectors of the federal government and in some cases had been directly responsible for regulating the industry where they now work. These former policymakers who have taken advantage of the "revolving door" find tremendous policy success in large part because of information asymmetries. In addition to having inherent informational advantages as a result of their previous positions in government, the dairy industry also has an extraordinary financial and resource advantage compared to virtually all other groups that would be opposed to some or all of the industry's priorities.

The second factor is the large sum of political donations that the dairy industry has funneled to congresspeople, particularly in the last few decades. Similar to the revolving door phenomenon, this is not a completely unique attribute in the political world; however, the dairy industry achieves success through the omnipresence of dairy operations, and these businesses provide substantial employment and economic generation within every U.S. state. Given this feature, combined with congresspeople's incentive to promote industries operating within their district or state, especially those that contribute to their political campaigns, the dairy industry has secured a strong political foothold across much of the country. Consequently, this has made dairy promotion a largely bipartisan issue within Congress. Given the otherwise divided landscape of Washington in recent times, promoting the dairy industry is therefore seen as an unordinary place for finding common ground.

Lastly, the dairy industry has made a concerted effort to intensively study the possible health benefits of dairy consumption, and this has resulted in propagandized information that often misconstrues findings or exploits scientific researchers in exchange for financial gain. As it relates to achieving success in the federal policy arena, the decades-long campaign onslaught has increasingly convinced policymakers that the data must be true given the preponderance of favorable findings. Many policymakers have thus been cognitively captured by this information operation and are as a result predisposed to favor future pro-dairy findings.

While these three mechanisms most clearly demonstrate how the industry has captured federal policymakers from the outside, another institutional factor is also tremendously influential. In addition to providing nutritional advice, the USDA must also unequivocally promote the U.S. dairy industry in all of its forms. This defective mandate, where the government agency becomes a vessel for industry interests, constitutes a complete form of regulatory capture.

The remainder of the thesis will analyze each mechanism in detail as it relates to the modern dairy industry in addition to the USDA's conflict of interest.

Revolving Door Bureaucrats

The revolving door phenomenon is a metaphoric concept that describes a widespread practice in Washington. Policymakers use their inside government networks to transition into private sector careers, oftentimes in the political lobbying, strategy, and consulting sectors. The term itself originates from the broader tendency of public officials to swing back-and-forth between public and private spheres several times throughout their career (Draca 2014). Laws regulating these practices are relatively lax in the U.S. For example, senators must abide by a two-year "cooling off" period after retirement before they can work for lobbying groups, and most other public officials must also wait one to two years (Maskell 2014).

Trading influence for career opportunities has become exceedingly common across all branches of the federal government in Washington, and the dairy industry has not been an exception. According to the Open Secrets database, the industry in 2019 spent nearly $8 million lobbying in Washington. Out of the 72 reported lobbyists on companies' payrolls, 42 or 58% of them were classified as revolving door lobbyists, indicating that they had worked in the public sector prior to becoming lobbyists. For the three dairy-related lobbying groups spending the most money in 2019, the percentage was even higher: in descending order, 75, 89, and 60% of their lobbyists had once worked for the federal government (Center for Responsive Politics n.d.).

This demonstrates that recent government experience is seen as a significant asset for lobbying employers, and perhaps even a necessity for certain positions. Such prioritization should not be surprising. Lobbyists who just left the public sector, particularly those from more senior levels, possess insider knowledge and skills that are undoubtedly valuable: a clear and pragmatic understanding of how legislative and regulatory processes operate, a working or even friendly rapport with current public officials who constitute power centers, and an ability based on real experiences to pinpoint efficient levers of persuasion when an industry needs a policymaker or agency to prioritize their issues.

From the perspective of public officials who search for lobbying opportunities, it is likewise not difficult to ascertain their motivations. Financial advantages undoubtedly take precedence. Land O'Lakes, a multi-billion-dollar cooperative that specializes in dairy products, paid their three internal lobbyists approximately $1.7 million each in 2019 (Center for Responsive Politics n.d.). Considering that this seven-figure sum, which is commonplace among lobbying salaries, represents around ten times more than a senator or congressperson's annual salary, it should come as no surprise that many policymakers are highly motivated to move into the lobbying arena quickly after their stint in public service.

The success of dairy revolvers is based on both these pre-existing connections in addition to the fact that few to no counterarguments are presented to relevant policymakers. Environmental groups have a plethora of policy issues where their attention must be focused, and targeting the dairy industry on issues such as methane and fossil fuel emissions might be perceived as a poor tactical decision that would only serve to antagonize policymakers in future negotiations. Furthermore, explicitly anti-dairy groups that are politically active in Washington, such as the Physicians Committee for Responsible Medicine or the Vegan Trade Council, are minuscule in size. While the former organization has mostly worked to initiate lawsuits against the dairy industry (Physicians Committee for Responsible Medicine 2016), the Vegan Trade Council chalks up their uphill fight against the dairy industry in blunt terms: "What makes a lobby powerful is money. And there's no money behind this operation" (Atkin 2018).

With their considerable financial superiority, dairy companies and associations in Washington are able to exert an overwhelmingly one-sided influence campaign to advance their causes. Ensuring policy successes thus falls heavily on the insider experience and networks of revolver lobbyists. Five real dairy revolvers will now be briefly analyzed in order to show how the dairy industry uses a wide breadth of former policymakers to promote the adoption of their key priorities, which in turn raises many questions involving conflicts of interest.

Tom Vilsack, the USDA Secretary from 2009-2017, raised eyebrows when, at the end of President Obama's second term, he immediately took the position of CEO at the US Dairy Export Council, an organization that lobbies for dairy producers in Washington. Since dairy is mostly regulated by the USDA, Vilsack's transition was clearly valued. Moreover, his long tenure in the cabinet was unparalleled: he remained the only secretary who had been a part of President Obama's administration through both terms. This aspect is particularly important, as one recent study showed that cabinet secretaries with longevity are the most prized positions for industries to recruit (Houston and Ferris 2015).

Although many questions regarding conflicts of interest and undue influence about his transition are more speculative in nature, they are still important to assess the extent to which his tenure while in office was impacted by his subsequent position: how early did the US Dairy Export Council approach him about the job? Was it while he was still in office? If so, did this influence his policymaking decisions at the USDA (of which there are a multitude related to dairy policy)? These might include dairy-related regulations, personnel hiring decisions, and recommendations to the Congress and President.

Additionally, the scenario poses a substantial problem for current and future USDA secretaries and other officials: would they *really* be able to turn down a requested meeting or request from the former secretary, even if his lobbying went against expert opinions regarding certain dairy policies? Furthermore, USDA bureaucrats who worked closely with him while he was in office may wish to maintain his goodwill in the hopes of working for the Council or a related lobbying group, and this desire could impact their contemporaneous decision-making. For instance, Karla Thieman, who worked as Vilsack's chief of staff at the USDA, left the agency shortly after him to work as a lobbyist for two of the largest dairy lobbying organizations in Washington (Center for Responsive Politics n.d.). These are only a few of the problematic aspects that testify to how regulatory capture can be pervasive through the revolving door phenomenon.

The late House Representative Gerald Soloman is another example of a high-profile dairy revolver. After his retirement from Congress in 1999, he ardently lobbied for dairy interests to the Clinton administration and Congress. Despite a legal restriction that placed a one-year cooling off period for former members of Congress lobbying their former workplace, Soloman skirted the intent of this law almost immediately by appearing at a congressional news conference "where several members of Congress promoted legislation that would allow dairy farmers in the East and South to form a cartel intended to keep milk prices higher" (Dao 1999). This behavior occurred while the former congressman was actively working with a dairy lobbying coalition that was in favor of the legislation.

Research indicates that revolver tendencies from federal congresspeople and senators have grown enormously over the past half-century. Only five percent became lobbyists after their career in public service in the 1970s, but that number jumped to around one-third of congresspeople and one-half of senators by 2016 (Lazarus, McKay and Herbel 2016). The hiring of such high-profile policymakers has been shown to increase the chances for earmarks to be attached to legislation that benefit the respective industry (Lazarus and McKay 2012).

Looking through the perspective of a congressman like Soloman, the range of influence that he garnered is significant. Even before his one-year cooling off period had expired, Soloman bragged that "I'm on a first-name basis with the chairman of the Commerce Committee…he's one of my best friends. So naturally I'm going to be able to talk to Tom" (Dao 1999). In addition to his allied congresspeople who would be willing to receive his lobbying solicitations, including in informal settings where congresspeople might be more amendable to covert dealings, he also possesses the now dispersed arsenal of his former staff. Once members of congress leave office, their former staff often gravitate toward other offices through lateral or promotional moves. These influential people, including legislative directors, assistants, and coordinators as well as legal counsel and committee staff, would provide the former congressman with a multiplicity of new office connections, potentially with congressional offices where he would otherwise not have access. For instance, the former congressman noted that one of his lobbying partners would be an asset for him since he was already acquainted with the chiefs of staff for most committees in the House of Representatives (Ibid). Like cabinet secretaries, the lobbying power from former congresspeople is immense, and it encompasses several dimensions of influence.

The last type of revolver dynamic is underdiscussed in the news media but undoubtedly most rampant for those who transition from being congressional staffers to lobbyists. A quick perusal through LinkedIn or Open Secrets establishes this well-trodden career pathway: a staffer works in a congressional office for a few years, earning a few promotions and relationships with industry representatives who come to lobby for their causes. The staffer then decides to take advantage of those cultivated relationships, networking their way to a lobbying career in exchange for their experience and congressional relationships. For example, one senior legislative assistant in the House of Representatives (a mid-level position paying approximately 40-70 thousand dollars per year) transitioned into government relations at a milk producer group in Washington with a multi-six figure salary (LinkedIn 2020). Another person who worked as counsel in the Senate for only two years now earns over one million dollars annually at a leading dairy lobbying group (Ibid).

From former staffers' perspective, they may feel the need to "cash-in" while their networks remain relevant. A 2010 study found that once the senator for whom the lobbyist worked for retires, that lobbyist on average will experience a long-lasting 24% drop in generated revenue (Vidal, Draca, and Fons-Rosen 2010). In a similar fashion to former legislators, congressional staff-turned-lobbyists also benefit financially from existing networks (McCrain 2018), but the need to exploit those resources remains the same. Once a growing number of those connections decide to pursue careers outside of Capitol Hill, the lobbyists' overall value will depreciate.

The dairy industry profits mightily from recruiting these staffers. This is evidenced by the massive valuation of recent congressional revolvers, who earn an average salary of $550,000 (among the 16 recent congressional revolvers working for the five top spending dairy companies or associations that lobby in Washington) (Center for Responsive Politics n.d.). Because of lenient federal revolver and lobbying laws, many staffers view lobbying as an ultimate career goal, and this may restrain them from being overly tough against industries like dairy while they are working in public service. They may also attempt to pressure their supervisor to prioritize earmarks or niche projects deemed beneficial to the industry in an effort to curry favor for a potential job in the future. For example, one current lobbyist at the National Milk Producers Federation bluntly states in his company biography that he aided the dairy industry while working as a legislative director in Congress (National Milk Producers Federation n.d.). Altogether, dairy's extensive hiring from regulatory and legislative employees has a meaningful impact on its lobbying success, and with no countervailing forces to similarly use these tactics to the furthest extent possible, the trend will probably continue unencumbered.

Contemporary Political Donations

Another avenue of regulatory capture is the selective, strategic use of campaign donations to federal legislators in Congress. Contrary to popular opinion, research suggesting that political donations have a clear effect on policy outcomes are inconclusive at best. A recent analysis of close congressional, senate, gubernatorial, and state legislative elections found no statistically significant policy benefit for corporations whose favored candidate won their election (Fowler, Garro, and Spenkuch 2020). This finding is aligned with other studies that have not discovered meaningful advantages for political donations (Ansolabehere, Snyder, and Ueda 2004).

Despite these seemingly unintuitive results, the power of donations is not likely to be completely irrelevant. A comprehensive look of donations to state legislators in 2012 hypothesized a more nuanced theory: instances of more blatant *quid pro quo* political favors resulting from donations are rare to find; politicians for the most part are craftier than exposing themselves in such a manner, and this largely accounts for the unsettled research that tries to link the two actions (Powell 2012). Instead, the power of political donations is subtler. Politicians may aid the company or industry in ways that are both extremely meaningful to the industry and difficult to detect from the public or academic researchers. For instance, this might include the surreptitious insertion of a clause in a piece of legislation that disproportionately profits a company or targeted questions in committee hearings that prioritize an industry's agenda. Tammy Baldwin, a Democratic senator from Wisconsin who has received nearly $50,000 in political donations from the dairy industry, obtained a $20 million earmark for the Dairy Business Innovation Initiatives Program in 2019 (Sweeney 2019). Since she was able to secure this funding via the Senate Appropriations Committee before the legislation went to a vote before the full Senate, it would not be immediately detectable from information gleaned in the legislation itself. This is one example of the harder-to-trace methods that policymakers use to move their industry-favored agendas forward.

Even for legislators who actively try to not allow donations to influence their policymaking, unconscious bias may still creep in: "Even the best-intentioned legislator receiving money from an interest group is likely to at least listen to what donors have to say. And if you are hearing much more from people who donate money to you, it is hard not to be swayed by the *greater body of argument and evidence* [emphasis added] from donors" (Ibid).

From a broader perspective, a major contributor to the dairy industry's relevance in terms of donations to federal legislators is its wide reach. Despite having business concentrations in the West (e.g. California) and Midwest (e.g. Wisconsin), there are dairy operations in all fifty states (U.S. Department of Agriculture 2020), and this greatly aids the industry in having a justifiable donation footprint across both geographic regions and political ideologies.

An analysis of political donations in the last presidential election cycle validates such impact. In 2016, the dairy industry donated to 59 out of 100 sitting senators, many of whom were not even up for reelection. In the House of Representatives, 229 or 53% of all members received aid. Although the distribution of donations tilted Republican, the overall composition was not strictly partisan: 35 and 39% of the recipients were Democrats in the House of Representatives and the Senate, respectively. The regions where these donations were directed differed substantially, ranging from Alabama to North Dakota to Alaska (Center for Responsive Politics 2020). Moreover, there did not seem to be any apparent conservative or liberal preferences. For instance, both senators who voted most and least in line with President Trump's endorsed positions during his first term received money from the dairy industry (FiveThirtyEight Politics 2020).

Unmistakable pro-dairy support from both parties has revealed itself in both overt and covert manners, with both serving as evidence of the industry's tight grip on the federal legislature. For the former manner, a proposed bill entitled the DAIRY PRIDE Act was introduced in 2017 and again in 2019. In a move reminiscent of the anti-margarine campaigns of the late 19th century, the bill would force the FDA to not allow plant-based milk producers to use words like milk, yogurt, and cheese in the branding of their products. The bill has bipartisan and geographically diverse cosponsors in the Senate, ranging from liberal Elizabeth Warren of Massachusetts to conservative Jim Risch of Idaho (DAIRY PRIDE ACT 2019). The National Milk Producers Federation (NMPF), which represents dairy farmers across the U.S. and is the second-largest dairy lobbying spender in Washington, has intensively fought for its passage, saying before a congressional sub-committee that the legislation could "finally compel the FDA to enforce its existing standards of identity for dairy products" (Newhart 2020). Land O'Lakes, the largest dairy lobbying spender, even flew their Chief Operating Officer into Washington to speak with congresspeople about the merits of the Act (Land O'Lakes 2018). Of the nine senators sponsoring the 2019 version, these two organizations contributed to six of their reelection campaigns over the last three election cycles from their political action committees (PACs) (Center for Responsive Politics 2020). Policymakers are therefore prone to be responsive to the demands of these companies considering their vast geographical and job-retention influence: Land O'Lakes has 9,000 employees, the NMPF represents approximately 150,000 dairy producers, and both companies have locations in all 50 U.S. states (Land O'Lakes 2020) (U.S. Bureau of Labor Statistics 2019).

There are also more veiled influences that are present. Every five years, the USDA and DHHS jointly release the influential Dietary Guidelines for Americans, which sets dietary and health benchmarks for policymakers and the American public. The famous food pyramid (now Choose MyPlate) that is almost universally used in U.S. schools originated from these guidelines.

In congressional hearings directed to former USDA Secretary Vilsack concerning the upcoming 2015-2020 Dietary Guidelines, congresspeople asked the Secretary a range of questions in order to improve the guidelines or alert his attention to niche issues that they wanted to see prioritized. Two congresspeople explicitly asked about how dairy would be promoted, and both their use of language and relationship with the dairy industry proved to be insightful:

Congresswoman DelBene, a Democrat from Washington state, said: "First I wanted to ask you about dairy. As you know, it has been a distinct food group in the past, and, according to the report, dairy products contribute *many essential nutrients, Vitamin D, calcium, magnesium, iron, Vitamin A, riboflavin*. And yet, since 2010, one percent flavored milks haven't been allowed in schools, and we also know that dairy consumption has dropped in girls ages 4 to 8....*how do we continue to make sure students have access to appealing and nutritious dairy products*, and do you expect that dairy would remain its own food group going forward?"

Congressman Thompson, a Republican from Pennsylvania, asked: "Why do Americans, especially children over the age of 4, continue to fall short of the Dietary Guidelines' recommended servings of milk, and *its nine essential nutrients and vitamins*, and what can we do to remove policies that are hindering milk consumption, *or promote policies that could enhance milk consumption*" (Hearing to Review the Development of the 2015 Dietary Guidelines for Americans 2015) [emphasis added]?

There were many peculiar aspects to the policymakers' line of inquiries. Each was given four minutes for their questions, and they both decided to first ask about dairy promotion, which clearly indicated that they wanted to make sure that the Secretary would be able to provide a full response to the question. Next, each legislator specifically noted various health benefits from dairy, namely their "essential nutrients." Although they approached the issue from slightly different angles, they both noted that dairy consumption had decreased or was deficient among children aged four and older. Finally, the core part of their actual question was nearly identical: how can the federal government work to increase dairy consumption (and thus dairy industry sales) among Americans, especially younger ones?

The multiple commonalities between each policymaker's questioning during the committee hearing strongly suggest that dairy lobbyists may have provided each with talking points that highlighted the most pressing arguments in favor of more dairy consumption. If this situation occurred, it would be far from uncommon. Talking points and other forms of policy guidance and information are crucial aspects of a lobbyist's informational toolkit to policymakers on Capitol Hill. Congresspeople are often pressed for time and cannot digest excessive information, so lobbyists will often provide one-pagers in lieu of reports that condense the industry's priorities into succinct talking points (International Society for Technology in Education n.d.).

While this practice is common among all types of lobbying groups in Washington, the more important question relates to which congresspeople receive such information and why they allow such information into their office in the first place. In the case of DelBene's and Thompson's dairy advocacy, the source is not difficult to find. During DelBene's time in the House of Representatives from 2012-2020, the dairy industry contributed $42,000 to her campaigns. For Thompson, the amount was $136,150 between 2010-2020 (Center for Responsive Politics 2020).

The effects of having geographically distributed dairy operations are clear: even if such widespread political donations do not directly show a policymaker's flagrant preference for pushing the dairy industry's policies, the openness to solicit information and perspectives from the industry can manifest itself in other ways. Whether through committee hearing questions, staff hiring, or legislative amendments, the resulting effects of political donations can be profound and biased.

Industry-Funded Nutrition Studies

With their resource and financial advantages that are used to proactively convince policymakers to support pro-dairy policies, the dairy industry has also launched a nutritional study-based defense against claims that dairy is unnecessary or even detrimental to human health. Although journalists and researchers in the early 1970s had increasingly signaled alarm at the negative health risks of high-fat and cholesterol foods like dairy (Brody 1970, Brody 1973), it was only with Senator George McGovern's *Dietary Goals for the United States* report in 1977 that the dairy industry reacted in alarm. For the first time, the U.S. government specifically recommended that Americans decrease their overall food consumption, particularly with foods that contained a high level of cholesterol and saturated fat (Senate Select Committee on Nutrition and Human Needs 1977).

Despite government concessions that later softened the language of this changed stance, Americans began to heed this advice, and dairy sales gradually plummeted over the next several decades (Barrett and Higgins 2020). Moreover, a relatively broad group of influential health entities has made it clear that they do not consider dairy to be an essential part of the human diet. Both the Harvard Healthy Eating Plate and the Canadian Nutritional Guidelines exclude dairy from their lists of recommended foods (Harvard T.H. Chan School of Public Health 2011, Health Canada 2019), and the American Medical Association "recommend[s] that the [USDA] and [DHHS] clearly indicate in the Dietary Guidelines for Americans and other federal nutrition guidelines that meat and dairy products are *optional*, based on an individual's dietary needs" (American Medical Association 2018).

Because of these trendlines, the dairy industry has worked to change the narrative by funding a plethora of studies that spin positive results by emphasizing dairy's nutritional benefits in order to influence policymakers and the public. Besides stymieing the decrease in consumer demand, it is essential for them to maintain dairy as a non-optional food group in federal publications, especially through the official dietary guidelines every five years. It could affect the extent to which the dairy industry receives subsidies from the federal government and federal school lunch reimbursements as well as the large amount of dairy foods that are funneled to federal assistance programs like the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) (Harkinson 2015).

There have consequently been thousands of industry-funded dairy research studies published in the last several decades. Many have touted conclusions that are in direct contrast to leading health organizations, such as a 2020 study indicating that dairy foods could reduce the risk of cardiovascular disease and type 2 diabetes or a 2019 study suggesting that the saturated fats in dairy products help to regulate cardiometabolic health (Hirahatake, et al. 2020, Unger, Torres-Gonzalez, and Kraft 2019). A metanalysis of 79 milk-related studies between 1999-2003 concluded that over one-third of them received dairy industry funding, and out of the 15 studies that were completely funded by dairy companies, not one produced a negative finding (Lesser, et al. 2007). Industry groups additionally donate money to groups like the American Society for Nutrition, which publishes the prominent scientific research publication *American Journal of Clinical Nutrition* (American Society for Nutrition 2020).

The implications of these massive funding and sponsorship channels directly relate to informational imbalances that can infiltrate governmental approaches to food and nutrition policies. By being able to fund a grossly disproportionate number of studies that can overwhelm and counteract more credible, non-conflicted research, policymakers will become more reluctant to enact transformative policies such as making dairy explicitly optional in dietary guidelines. Alternatively, policymakers may be more willing to advocate dairy promotion programs that appear on the surface to be based on solid scientific grounding. From the perspective of a regulator who is working on dairy nutrition policy, their train of thought might be conflicted: while they may recognize that influential health organizations have insisted that dairy should be an optional or moderated part of one's diet, they also see the extensive academic literature that attests to its seemingly never-ending benefits. Though most of these studies are funded by the dairy industry, regulators may not see them as inherently untrustworthy given the sound methodology in most of them.

Indeed, Marion Nestle has commented on this apparent dilemma, arguing that most dairy-funded research studies do not intentionally distort data; rather, most biases turn up in either the research question (e.g. saying that cheese lowers blood cholesterol levels because the study only compared it to butter) or through semantic phrasings (e.g. interpreting a neutral result as positive by manipulating the language) (Nestle 2018). Overall, this ends up being a distinction without a difference: policymakers either largely become confused by conflicting data and keep the status quo in nutritional dairy guidelines or come to believe in the apparent wealth of benefits derived from such studies. This in turn represents a form of cognitive capture, whereby the "creeping colonization of ideas" from the dairy industry becomes gradually engrained in policymakers' psyche (Engstrom 2013).

One emblematic example of this dynamic is the peculiar relationship between Dairy Management and Michael Zemel, a nutrition professor at the University of Tennessee. Dairy Management, a semi-public organization that will be discussed at length in the next chapter, primarily works to promote dairy sales in all of their forms. It formulates and launches nationwide marketing campaigns for dairy products, and, most importantly in this case, the USDA must approve major marketing campaigns and contracts since federal tax dollars partially fund the organization (Simon 2014).

Professor Zemel began preliminary studies that explored correlations between dairy and weight management in the 1980s. By the next decade, Dairy Management and its subsidiary counterpart the National Dairy Council had taken notice. Between 1998-2005, the organization gave Zemel around $2.1 million to specifically examine this potential link further (NBC News 2005). While the subject matter of these studies were rather obscure, such as *Mechanism of intracellular calcium ([Ca^{2+}]) inhibition of lipolysis in human adipocytes* or *Regulation of adiposity by dietary calcium* (Zemel, Xue, et al. 2001, Zemel, Shi, et al. 2000), Dairy Management used these series of studies to push one message: dairy products cause weight loss. The NDC took this information to launch a $200 million national advertisement campaign that heralded dairy's weight loss potential with slogans like "Lose More Weight," "Slim Down with Yogurt," and "Burn More Fat" that were placed on dairy packaging (NBC News 2005). This came despite a 2003 metanalysis of dairy consumption and weight loss studies that found no correlation as well as Zemel's own nuanced claim that his findings only supported potential weight loss for those with a low-calorie diet who have insufficient calcium intake (Barr 2003). Amid growing backlash from the scientific community and a lawsuit by the Physicians Committee for Responsible Medicine, the NDC ended its campaign in 2007 (Moss 2010).

The shocking aspect of this story is not that a promotional organization would mislead the public in order to boost dairy sales; rather, the more egregious part is that the USDA, which regulates these types of marketing actions from the NDC, would approve this multi-million-dollar campaign without conducting a more meticulous examination of whether the majority of scientific research backed up that claim. Even when faced with overwhelming scientific literature that found no conclusive link between dairy products and weight management, government attorneys nonetheless attempted to justify the marketing ploy, saying that the USDA had "reviewed, approved and continually oversaw" the project (Ibid).

The USDA's apparent myopia as it concerned the substantial evidence conflicting with Zemel's studies is telling. It suggests that the organization was able to successfully utilize Zemel's multiple research studies as sufficient proof that dairy products could truly cause weight loss. This occurred because of the advantages that cash-flushed organizations like the NDC have in funding large amounts of research that can seemingly overwhelm other data, even when it is equally sound methodologically. Perhaps more alarming, the firm connection between Dairy Management and the USDA raises even larger questions concerning conflicts of interest dealing with the main internal source of captured ties between the federal government and the dairy industry. This relationship will be described in the next chapter.

Conflicting Roles of the USDA

The most blatant form of regulatory capture deals with the inherently conflicting role that the USDA has maintained over the last 35 years. While the USDA's original purpose was "to ensure a sufficient and reliable food supply and to provide to the public useful information on subjects related to Agriculture" (Department of Agriculture Organic Act 1862), this slowly changed with massive subsidies and regulations in the 1930s that created lasting dependencies with the dairy sector. Such commonplace governmental interactions were still normal and comparable to other major food industries until the Dairy Production Stabilization Act of 1983. That legislation launched a national dairy producer program that would overtly promote, research, and provide pro-dairy education in an effort to increase consumption and reduce surpluses through checkoff programs. Dairy Management would eventually become the umbrella organization tasked with administering these goals, which included nutritional studies and marketing campaigns that were pro-dairy in nature (Moss 2010).

Because the USDA alongside the DHHS are also legally required to publish nutritional guidelines every five years, which can then influence nutritional policies in various federal administrative sectors, this clearly represents a conflict of interest. For instance, it would certainly not be in the best interest of the USDA to follow the Canadian lead in officially making dairy optional in its reports because of its parallel mandate to actively promote that good. Likewise, this obligation could potentially affect the way in which regulatory policymakers even approach the issue from an institutional standpoint. Studies that demonstrate negative effects from dairy consumption or those that reject previously held truths, such as dairy's ability to prevent osteoporosis, may not be weighted as heavily as they would be for other food industries not as closely linked to the federal government. After all, a policymaker may theoretically conclude that 'we (the USDA) are *supposed* to help promote this product, not inhibit it, so those studies must be somehow flawed or anomalous in some regard.' In other words, policymakers will be more likely to discount contradicting evidence if the institution for which they work also has a clear aim to endorse that item.

This incongruous juxtaposition can be viewed as a defective mandate or an extreme form of regulatory capture where the department's mandated purpose is to work at the behest of the industry (Baxter 2011, Shapiro 2011). In this regard, the level of capture is total, thus making it appear as though dairy permanently drives the federal agenda versus simply being able to influence it in subtle and multifaceted ways. One part of the USDA's oversight responsibility over Dairy Management is to periodically report to Congress on how successful the organization has been in promoting dairy (Simon 2014). The 2017 report to Congress, for instance, provides detailed expenditure and contract reports from Dairy Management over the preceding year. Contracts include publicity, marketing, and consulting firms that worked for Dairy Management's dairy advertisement campaigns. In that report's concluding remarks, the USDA boasts that "the National Programs have effectively increased the demand for promoted dairy products, especially cheese and butter, and moderated the decline in per capita fluid milk consumption" (U.S. Department of Agriculture 2017).

The USDA's yearly reports to Congress signal a strong vested interest from both government branches in the success of the quasi-governmental organization, and the main criteria of success for Dairy Management is increased dairy sales. Therefore, beyond the external maneuverings of lobbying forces pressuring individual policymakers to prioritize dairy issues, there is also an institutional federal bias that is required to perform the same action.

Subsequently, this dynamic puts the USDA in a particular bind. If they were in the future to deemphasize or remove dairy from a main food group in their Choose MyPlate recommendations, they would at the very least appear to be hypocritical and at odds with their promotional policies. Giving a more nuanced description of dairy's various negative health side effects that have been demonstrated in studies, especially when consumed in excess, would similarly go against stated policies by implicitly incentivizing Americans to purchase fewer dairy products. Therefore, this creates a situation that may be closely characterized as cognitive dissonance, whereby any alternative forms of information, regardless of their veracity or alarming consequences, might be disregarded or deemphasized in the pursuit of carrying out the USDA's mandated goals.

Certain ramifications of this perplexing policy have been rather egregious. Although Dairy Management is perhaps most well-known for their "Got Milk?" campaign, where celebrities sported milk mustaches on advertisement posters across the nation in an effort to slow the decline of milk consumption, there have been more recent instances that are highly questionable in terms of promoting ostensibly healthy forms of dairy.

The 2015-2020 Dietary Guidelines for Americans specifically promoted low to fat-free versions of dairy products (U.S. Department of Health and Human Services and U.S. Department of Agriculture 2015), yet the advertising arm of Dairy Management (which the USDA approves and Congress regulates) has participated in fast-food campaigns through financial and marketing schemes to sell products that are extremely difficult to justify as nutritious. For instance, one of their programs supported Taco Bell in marketing their double steak quesadillas and cheese shreds, and this helped to increase their dairy sales by four percent. Pizza Hut created a 3-Cheese Stuffed Crust Pizza and a "Summer of Cheese" advertising campaign with their aid, and Dominos was assisted by a $35 million grant from Dairy Management to add more cheese to their pizzas. Additionally, these checkoff programs have partially financed programs that target sugary and fatty chocolate milk for children in school with slogans such as "Chocolate Milk Has Muscle," "Raise Your Hand for Chocolate Milk," and "Fuel Up to Play" (Simon 2014).

Such actions raise implications that go beyond questions of whether promotional mandates raise conflicts of interest related to dietary guidelines. They also suggest that USDA officials, through their approval and guidance of these types of campaigns, are willing to prioritize dairy sales in all forms, healthy or not, over their currently stated nutrition recommendations for Americans. Put differently, a continual and reliable profit for the dairy industry is placed ahead of encouraging the country to limit their intake of foods that contribute to many of the leading causes of premature death such as heart disease. Out of all the capture mechanisms between dairy advocates and others who may challenge their views, this aspect is likely the most pernicious in terms of long-term consequences. Regulatory and some congressional policymakers may not even wish to consider other points of view because of its potential role in diminishing the USDA's legal mandate to promote dairy sales.

Conclusion

A confluence of historical, legal, political, and social forces has made the dairy industry a heavyweight player in Washington. While the industry has maintained a powerful role in influencing federal policymaking since at least the late 1800s, the tactics used to pressure lawmakers into acquiescing to their demands have diversified in the past few decades. Some of these mechanisms, such as the revolving door phenomenon and political donations that induce *quid pro quo* behavior, relate to aspects of federal governance that are nearly ubiquitous across all industries and government agencies. The extensive use of industry-funded nutrition studies is also not exclusive to the dairy industry, as related food sectors such as meat and sugar have also attempted to impact regulations through the proliferation of favorable research results. Moreover, the USDA also promotes the sale of agricultural products that range from eggs to avocados, and it has funded similarly popular mass marketing campaigns for other problematic food sources (e.g. "Beef: It's What's for Dinner") (Beef Board 2019). Therefore, in order to reign in some of the undue sway that the dairy industry has attained within the federal government, more systemic problem-solving may be required.

This thesis has analyzed the main facets of the dairy industry's regulatory capture within the federal government, arguing that asymmetric information, geographic scope, cognitive capture, and a defective mandate have created opportunities for the dairy industry to increase in power despite its reduced commercial influence. The dairy industry has exploited these advantages by using money, personnel, research, and other resources to persuade policymakers from the outside with lobbying and information campaigns as well as from the inside through governmental mandates.

At least in the short term, any changes that could alter the *status quo* as described here are unlikely. As long as there is a divided Congress or a president from a different party than the majority in at least one house of Congress, seismic changes in the area of campaign finance reform and stricter restrictions on revolvers are unlikely because of hyperpartisanship. Moreover, many policymakers have a strong interest in making sure that these systems do not change, given that their reelection chances and future job prospects may become more tenuous with sweeping changes. Even without that hurdle, a conservative-leaning Supreme Court might strike down any changes based on first amendment rights.

Likewise, private dairy corporations and associations are fully within their first amendment constitutional rights to fund nutrition studies, even ones that are deliberately biased in favor of dairy interests. The one source of influence that could potentially be shifted policy-wise are the incompatible USDA mandates. If the USDA wants to continue promoting the sale of dairy products, all nutrition guidelines for Americans could be moved to the DHHS or a newly carved out independent agency. While this would still technically constitute a federal government-wide conflict of interest, it would not be as glaringly concerning as one agency holding simultaneously diverging missions.

These various political restraints that enable the dairy industry to keep its influencing prowess perhaps provide a useful tool for more systemically answering the main question of why the dairy industry has remained so powerful despite its waning consumer influence: policy and institutional changes within government can be slow, arduous, and not entirely dependent on shifting market dynamics. An even more prolonged continuation of the industry's demise in the private sector, including a diminishment of profits and reputation, may be the only pathway for its governmental influence to eventually match its weakening market position.

Bibliography

2020. Accessed May 15, 2020. https://www.linkedin.com/in/autumn-veazey-price-4307702/.

2020. Accessed May 13, 2020. https://www.linkedin.com/in/john-hollay-98849216/.

American Medical Association. 2018. "Culturally Responsive Dietary and Nutritional Guidelines D-440.978."

American Society for Nutrition. 2020. *Sustaining Partners.* Accessed May 23, 2020. https://nutrition.org/sustaining-partners/.

Ansolabehere, Stephen, Jr., James M. Snyder, and Michiko Ueda. 2004. "Campaign Finance Regulations and the Return on Investment from Campaign Contributions." *Department of Political Science Massachusetts Institute of Technology.*

Atkin, Emily. 2018. *The Truth About the "Vegan Lobby".* 24 May. Accessed May 14, 2020. https://newrepublic.com/article/148477/truth-vegan-lobby.

Barr, Susan I. 2003. "Increased Dairy Product or Calcium Intake: Is Body Weight or Composition Affected in Humans?" *The Journal of Nutrition* 133 (1): 245S–248S.

Barrett, Rick. 2020. *'Struggling to tread water': Dairy farmers are caught in an economic system with no winning formula.* 18 February. Accessed May 3, 2020. https://www.jsonline.com/in-depth/news/special-reports/dairy-crisis/2019/05/16/wisconsin-dairy-farms-closing-milk-prices-drop-economics-get-tough/3508060002/.

Barrett, Rick, and Daniel Higgins. 2020. *Americans LoveSoda, Fancy Water and Fake Milk. Can the Dairy Industry Keep up?* 11 February. Accessed April 23, 2020. https://www.jsonline.com/in-depth/news/special-reports/dairy-crisis/2019/08/28/milk-vs-almond-soy-oat-milk-water-and-soda-how-can-dairy-compete-with-alternative-products/2141547001/.

Baumgartner, Frank R., and Beth L. Leech. 2003. "Interest Niches and Policy Bandwagons: Patterns of Interest Group Involvement in National Politics." *Journal of Politics* 63 (4): 1191-1213.

Baxter, Lawrence G. 2011. "Capture in Financial Regulation: Can We Channel It toward the Common Good." *Cornell Journal of Law and Public Policy* 21 (1): Article 9.

Beef Board. 2019. *Beef is on the Menu.* 12 June. Accessed May 27, 2020. https://www.beefboard.org/2019/06/12/beef-is-on-the-menu/.

Bolotova, Yuliya V. 2016. "An Analysis of Milk Pricing in the United States Dairy Industry." *Agribusiness* 33 (2): 194-208.

Brody, Jane E. 1973. *Heart Association Strengthens Its Advice: Cut Down on Fats.* 28 June. Accessed May 2, 2020. https://www.nytimes.com/1973/06/28/archives/heart-association-strengthens-its-advice-cut-down-on-fats.html.

—. 1970. *Low-Cholesterol Recipes From a Meat Loaf Maven.* 18 December. Accessed May 2, 2020. https://www.nytimes.com/1970/12/18/archives/lowcholestrol-recipes-from-a-meat-loaf-maven.html.

Bó, Ernesto Dal. 2006. "Regulatory Capture: A Review." *Oxford Review of Economic Policy* 22 (2): 203-225.

Carpenter, Daniel. 2010. *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA.* Princeton, New Jersey: Princeton University Press.

Center for Responsive Politics. n.d. *Client Profile: Land O'Lakes.* Accessed May 13, 2020. https://www.opensecrets.org/federal-lobbying/clients/lobbyists?cycle=2019&id=D000022070.

—. n.d. *Dairy.* Accessed May 9, 2020. https://www.opensecrets.org/industries/indus.php?ind=a04.

—. n.d. *Dairy: Lobbying, 2019.* Accessed May 13, 2020. https://www.opensecrets.org/industries/lobbying.php?ind=A04.

—. 2020. *Dairy: Money to Congress.* Accessed May 22, 2020. https://www.opensecrets.org/industries/summary.php?cycle=2020&ind=A04.

—. n.d. *Thieman, Karla.* Accessed June 1, 2020. https://www.opensecrets.org/revolving/rev_summary.php?id=80546.

Croley, Steven. 2010. "Interest Groups and Public Choice." *Research Handbook on Public Choice and Public Law* (Edward Elgar Publishing) Chapter 2.

Dao, James. 1999. *No Apologies as Solomon Takes Eagerly to Lobbying for G.E.* 1 June. Accessed May 9, 2020. https://www.nytimes.com/1999/06/01/nyregion/no-apologies-as-solomon-takes-eagerly-to-lobbying-for-ge.html.

Draca, Mirko. 2014. "Institutional Corruption? The revolving door in American and British politics." SMF-CAGE Global Perspectives Series: Paper 1, Department of Economics, University of Warwick and The Social Market Foundation.

Engstrom, David Freeman. 2013. "Corralling Capture." *Harvard Journal of Law and Public Policy* 36.

Erba, Eric M., and Andrew M. Novakovic. 1995. *The Evolution of Milk Pricing and Government Intervention in Dairy Markets.* Ithaca, New York: Cornell Program on Dairy Markets and Policy.

Feskanich, D., W. C. Willett, M. J. Stampfer, and G. A. Colditz. 1997. "Milk, Dietary Calcium, and Bone Fractures in Women: a 12-Year Prospective Study." *American Journal of Public Health* 87 (6): 992-997.

FiveThirtyEight Politics. 2020. *Tracking Congress In The Age Of Trump.* Accessed May 22, 2020. https://projects.fivethirtyeight.com/congress-trump-score/.

Fowler, Anthony, Haritz Garro, and Jörg L. Spenkuch. 2020. "Quid Pro Quo? Corporate Returns to Campaign Contributions." *University of Chicago Press* 82 (3).

Furlong, Scott R., and Cornelius M. Kerwin. 2005. "Interest Group Participation in Rule Making: A Decade of Change." *Journal of Public Administration Research and Theory: J-PART* 15 (3): 353-370.

Hall, Richard L., and Frank Wayman. 1990. "Buying Time: Moneyed Interests and the Mobilization of Bias in Congressional Committees." *American Political Science* 84 (3): 797-820.

Hao, Haihong, Guyue Cheng, Zahid Iqbal, Xiaohui Ai, Hafiz I. Hussain, Lingli Huang, Menghong Dai, Yulian Wang, Zhenli Liu, and Zonghui Yuan. 2014. "Benefits and Risks of Antimicrobial Use in Food-Producing Animals." *Frontiers in Microbiology* 5 (288).

Harkinson, Josh. 2015. "The Scary New Science That Shows Milk Is Bad For You." November/December. https://www.motherjones.com/environment/2015/11/dairy-industry-milk-federal-dietary-guidelines/3/.

Harvard T.H. Chan School of Public Health. 2011. *Healthy Eating Plate.* Accessed May 18, 2020. https://www.hsph.harvard.edu/nutritionsource/healthy-eating-plate/.

Hasen, Richard L. 2012. "Lobbying, Rent-Seeking, and the Constitution." *Stanford Law Review* 64 (1): 191.

Hayes, Michael J., and Vinay Prasad. 2018. "Financial Conflicts of Interest at FDA Drug Advisory Committee Meetings." *Hastings Center Report* 48 (2): 10-13.

Health Canada. 2019. "Canada's Dietary Guidelines for Health Professionals and Policy Makers."

Hearing to Review the Development of the 2015 Dietary Guidelines For Americans, 114th Congress 1 (2015), https://www.govinfo.gov/content/pkg/CHRG-114hhrg97182/html/CHRG-114hhrg97182.htm

Hirahatake, Kristin M., Arne Astrup, James O. Hill, Joanne L. Slavin, David B. Allison, and Kevin C. Maki. 2020. "Potential Cardiometabolic Health Benefits of Full-Fat Dairy: The Evidence Base." *Advances in Nutrition* 11 (3): 533–547.

Houston, R., and S. Ferris. 2015. "Does the revolving door swing both ways? The value of political connections to US firms." *Managerial Finance* 41 (10): 1002-1031.

Igan, Deniz, and Prachi Mishra. 2014. "Wall Street, Capitol Hill, and K Street: Political Influence and Financial Regulation." *The Journal of Law and Economics* 57 (4): 1063-1084.

International Society for Technology in Education. n.d. *How to Create a One-Pager for Policymakers: Tips and Template.* Accessed June 4, 2020. https://id.iste.org/docs/pdfs/iste-advocacy-toolkit---how-to-create-a-one-pager.pdf.

Kwak, James. 2014. "Cultural Capture and the Financial Crisis." *Cambridge University Press* 71-98.

Land O'Lakes. 2020. *By the Numbers.* Accessed June 9, 2020. https://www.landolakesinc.com/business-overview.

—. 2018. *Speaking out on trade concerns.* Accessed June 9, 2020. https://www.landolakesinc.com/Members/Member-News/June-2018/Land-O-Lakes-advocates-for-US-Dairy.

Langbein, Stanley I. 2010. "Cognitive Capture, Parliamentary Parentheses, and the Rise of Fractional Apportionment." *Tax Manag. Int. Journal* 39.

LaPira, Timony M., and Herschel F. Thomas. 2017. *Revolving Door Lobbying: Public Service, Private Influence, and the Unequal Representation of Interests.* Lawrence, Kansas: University Press of Kansas.

Lazarus, J., A. McKay, and L. Herbel. 2016. "Who walks through the revolving door? Examining the lobbying activity of former members of Congress." *Int Groups Adv* 5: 82-100.

Lazarus, Jeffrey, and Amy Melissa McKay. 2012. "Consequences of the Revolving Door: Evaluating the Lobbying Success of Former Congressional Members and Staff." *Midwest Political Science Association Annual Meeting.* Chicago.

Lesser, Lenard I., Cara B. Ebbeling, Merrill Goozner, David Wypij, and David S. Ludwig. 2007. "Relationship between Funding Source and Conclusion among Nutrition-Related Scientific Articles." *PLoS Med.* 4 (1): e5.

Lessig, Lawrence. 2011. *Republic, Lost: How Money Corrupts Congress -- and a Plan to Stop It.* Twelve.

Levine, M. E., and J. L. Forrence. 1990. "Regulatory Capture, Public Interest, and the Public Agenda: Toward a Synthesis." *Journal of Law, Economics, and Organization* 6: 167-198.

Luechinger, Simon, and Christoph Moser. 2014. "The value of the revolving door: Political appointees and the stock market." *Journal of Public Economics* 119 (C): 93-107.

Maskell, Jack. 2014. *Post-Employment, "Revolving Door," Laws for Federal Personnel.* Prepared for Members and Committees of Congress, Washington, D.C.: Congressional Research Service.

McCausland, Phil. 2018. *Best Advice to U.S. Dairy Farmers? 'Sell out as Fast as You Can.* 30 June. Accessed April 24, 2020. https://www.nbcnews.com/news/us-news/best-advice-u-s-dairy-farmers-sell-out-fast-you-n887941.

McCrain, Joshua. 2018. "Revolving Door Lobbyists and the Value of Congressional Staff Connections." *The Journal of Politics* 80 (4): 1369-1383.

Meade, J. E. 1949. *Planning and the Price Mechanism; the Liberal-Socialist Solution.* New York: Macmillan.

Mickle, W. T. 1941. "Margarine Legislation." *Journal of Farm Economics* (Oxford University Press) 23 (3): 567-583.

Miller, Geoffrey P. 1989. "Public Choice at the Dawn of the Special Interest State: The Story of Butter and Margarine." *California Law Review* (California Law Review) 77 (1): 83-131.

Moss, Michael. 2010. *While Warning About Fat, U.S. Pushes Cheese Sales.* 6 November. Accessed April 27, 2020. https://www.nytimes.com/2010/11/07/us/07fat.html.

National Milk Producers Federation. n.d. *NMPF Staff.* Accessed June 1, 2020. https://www.nmpf.org/team/paul-bleiberg/.

NBC News. 2005. *Link between dairy, weight loss unclear.* 17 July. Accessed May 2, 2020. https://www.nbcnews.com/health/health-news/link-between-dairy-weight-loss-unclear-flna1C9441641.

Nestle, Marion. 1993. "Food Lobbies, the Food Pyramid, and U.S. Nutrition Policy." *PubMed* 23 (3): 483-496.

—. 2018. *Unsavory Truth: How Food Companies Skew the Science of What We Eat.* New York: Basic Books.

Newhart, Beth. 2020. *US dairy groups press Congress on Dairy Pride Act.* February 6. Accessed June 9, 2020. https://www.dairyreporter.com/Article/2020/02/06/US-dairy-groups-press-Congress-on-Dairy-Pride-Act.

Novak, Matt. 2012. *The Milkman's Robot Helper.* Smithsonian Institution. 28 March. Accessed May 8, 2020. https://www.smithsonianmag.com/history/the-milkmans-robot-helper-166596016/#e2PWzxWZV6VrVxtR.99.

Novak, William J. 2013. "A Revisionist History of Regulatory Capture." *Cambridge University Press* 25-48.

Olson, Mancur JR. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups.* Cambridge, Massachusetts: Harvard University Press.

Peltzman, Sam. 1976. "Toward a More General Theory of Regulation." *The Journal of Law & Economics* 19 (2): 211-240.

Physicians Committee for Responsible Medicine. 2016. *Federal Court Dismisses Physicians Committee Lawsuit Over Industry Influence on Food Policy.* 14 October. Accessed May 25, 2020. https://www.pcrm.org/news/news-releases/federal-court-dismisses-physicians-committee-lawsuit-over-industry-influence.

Pigou, A. C. 1932. *The Economics of Welfare.* MacMillan.

Posner, Richard. 1974. "Theories of Economic Regulation." *Bell Journal of Economics* 5 (2): 335-358.

Powell, Lynda W. 2012. *The Influence of Campaign Contributions in State Legislatures.* University of Michigan Press.

Putnam, Judith Jones, and Jane E. Allshouse. 2003. *Trends in U.S. Per Capita Milk and Cheese Consumption, 1909 to 2001*. Economic Research Service, U.S. Department of Agriculture, Washington, D.C.: U.S. Department of Agriculture.

Renehan, Andrew G., Marcel Zwahlen, Christoph Minder, Sarah T. Odwyer, Stephen M. Shalet, and Matthias Egger. 2004. "Insulin-like Growth Factor (IGF)-I, IGF Binding Protein-3, and Cancer Risk: Systematic Review and Meta-Regression Analysis." *The Lancet* 363 (9418): 1346-1353.

Riefler, Winfield W. 1947. "Our Economic Contribution to Victory." *Foreign Affairs* 26 (1): 90-103.

Schlozman, K. L., and T. R. Burch. 2009. "Political voice in an age of inequality. In America at Risk: Threats to Liberal Self-Government in an Age of Uncertainty." *University of Michigan Press* 140-173.

Senate Select Committee on Nutrition and Human Needs. 1977. "Dietary Goals For The United States." *Nutrition Reviews* 35 (5).

Shapiro, Sidney A. 2011. "The Complexity of Regulatory Capture: Diagnosis, Causality and Remediation." *Roger Williams University Law Review* 102 (1): 101-172.

Simon, Michele. 2014. *Whitewashed: How Industry and Government Promote Dairy Junk Foods.* EatDrinkPolitics.

Solomon, Steven Davidoff. 2010. *The Government's Elite and Regulatory Capture.* 11 June. Accessed May 4, 2020. https://dealbook.nytimes.com/2010/06/11/the-governments-elite-and-regulatory-capture.

Stigler, George J. 1971. "The Theory of Economic Regulation." *Bell Journal of Economics* (The RAND Corporation) 2 (1): 3-21.

Sweeney, Rebekah. 2019. *WCMA Applauds Sen. Baldwin, Congress Upon Approval of $20M in 2020 for Dairy Business Innovation.* December 19. Accessed June 8, 2020.

https://www.wischeesemakersassn.org/news/wcma-applauds-sen-baldwin-congress-upon-approval-of-20m-in-2020-for-dairy-business-innovation.

U.S. Bureau of Labor Statistics. 2019. *Occupational Employment Statistics.* Accessed June 9, 2020. https://www.bls.gov/oes/current/naics4_311500.htm.

U.S. Congress. Department of Agriculture Organic Act, 12 Stat 314. May 15, 1862.

U.S. Congress. House of Representatives. Committee on Agriculture. Hearing to Review the Development of the 2015 Dietary Guidelines for Americans. 114th Congress, 1st session, October 7, 2015.

U.S. Congress. Senate. Defending Against Imitations and Replacements of Yogurt, Milk, and Cheese To Promote Regular Intake of Dairy Everyday Act. S. 792. 116th Congress, 1st Session. Introduced in Senate March 14, 2019.

U.S. Department of Agriculture. 2020. *Dairy Overview.* 24 March. Accessed May 20, 2020. https://www.ers.usda.gov/topics/animal-products/dairy/.

U.S. Department of Agriculture. 2017. "Report to Congress on the Dairy Promotion and Research Program and the Fluid Milk Processor Promotion Program: 2017 Program Activities." Report to Congress, Washington, D.C.

U.S. Department of Health and Human Services and U.S. Department of Agriculture. 2015. "2015–2020 Dietary Guidelines for Americans: 8th Edition." xiii.

Unger, Allison L., Moises Torres-Gonzalez, and Jana Kraft. 2019. "Dairy Fat Consumption and the Risk of Metabolic Syndrome: An Examination of the Saturated Fatty Acids in Dairy." *Nutrients* 11 (9): 2200.

Vidal, Blanes i, Mirko Draca, and Christian Fons-Rosen. 2012. "Revolving Door Lobbyists." *American Economic Review* 102 (7): 3731-48.

Vidal, Jordi Blanes i, Mirko Draca, and Christian Fons-Rosen. 2010. "Revolving Door Lobbyists." *CEP Discussion Papers from Centre for Economic Performance, LSE.*

Wagner, Wendy E. 2010. "Administrative Law, Filter Failure, and Information Capture." *Duke Law Journal* 59: 1321-1432.

Wheless, Benjamin F., and W. Arthur Lewis. 1951. "The Principles of Economic Planning." *Southern Economic Journal* 18 (1).

Wiley, Andrea S. 2014. *Cultures of Milk: the Biology and Meaning of Dairy Products in the United States and India.* Cambridge, Massachusetts: Harvard University Press.

Zemel, Michael B., Bingzhong Xue, Andrew G. Greenberg, and Frederic B. Kraemer. 2001. "Mechanism of intracellular calcium ([Ca2+]i) inhibition of lipolysis in human adipocytes." *The FASEB Journal* 15 (13).

Zemel, Michael B., Hang Shi, Betty Greer, Douglas Dirienzo, and Paula, C. Zemel. 2000. "Regulation of adiposity by dietary calcium." *The FASEB Journal* 14 (9).