

Organizational Reputation and Strategic Communication:

the pesticide Chlorpyrifos and EFSA and EPA responses

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Abstract

How does the level of organizational reputation of regulatory agencies explain their strategic communication? This study will answer this question by theorizing the concept of organizational reputation of (international) bureaucracies. Additionally, the study will explain how the developed level of reputational status affects strategic agency communication during controversial issues. In order to do this, this study has selected an agency with a developing reputational status (EFSA, European Food and Safety Authority) as well as an agency with a strongly developed reputational status (EPA, US Environmental Protection Agency). A recent, salient issue during which both agencies experienced external threats to their reputational status is the case of the pesticide Chlorpyrifos. Because various formal and informal audiences challenged the agencies to respond, this study will look at the efforts of both agencies to explain how their reputational status influences their strategic external communication.

Keywords: organizational reputation, regulatory agencies, Chlorpyrifos, scientific expertise, strategic external communication

Foreword

The fact that I am writing the foreword of my Master Thesis means that my graduation is within reach and closer than ever. During participation in the various courses of the Master Public Administration at Leiden University, I have developed and grown a lot. While my goal of finishing everything within a year was rather ambitious, I am glad I persisted and passed all of my courses before the handing in of my thesis in January 2020. Throughout this master's degree, which I started with in February 2019, I have gained more insight in what interests me most and what I want to continue doing. Also, being enrolled in the International and European Governance track, I became more and more aware of the complexity of governance systems, which interests me a lot. However, this complexity also made me skeptical from time to time. Is there a possibility to tackle the most complex issue? Does this complexity of the international governance network result in inertia? How can international cooperation initiatives deal with realist leaders that ignore all international aid and violate human rights or destroy the environment? This master taught me one important lesson; if we want to make big changes, this will most likely succeed through international cooperation.

The constant zooming out in an attempt to be able to oversee everything makes it very interesting to zoom in again. How do processes work within an organization? How can decentralized agencies influence the actual processes of decision-making? How can we explain their behavior? Gaining knowledge on these aspects, in my opinion, will help you understand the bigger picture in a more in-depth way. Therefore, I am really glad I got enrolled in the capstone of Organizational Reputation. I enjoyed reading about the characteristics and behavior of European Regulatory Agencies and how they, despite their intense efforts, struggle to make a difference within the regulatory system. They have a difficult task, living under the 'shadow of hierarchy' of the European Commission. Comparing the strategic responses of an EU agency with the responses of a US agency, despite their big differences in executive power, was therefore really interesting.

Last but not least, I want to especially thank my supervisor, Dr. Dovilė Rimkutė for her time and support. She helped me enormously in terms of brainstorming, research design and the polishing of my thesis. Before the first meeting, I had no idea which direction I wanted to go in, but after our various meetings, this became clear and I got inspired to look more into the concept of organizational reputation and strategic agency behavior. Moreover, I am very thankful for the scholars conducting thorough research on the topic. The variety of their insights and theories available made it very interesting to read through it all and write my thesis.

Eventually, after a successful defense of my thesis, I will leave the University of Leiden, which may be a little emotional after doing my bachelor and master at this university. However, I am looking forward to new challenges in the future. In February, I will start as an intern at the ministry of Foreign Affairs. Hopefully, I will be able to put the knowledge I gained during this Master and my previous studies into practice and prove that I am prepared for this new phase!

Gini op 't Ende

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Introduction

Legally binding regulation not only influences private industries and large companies. As an executive institution of the EU, the European Commission attempts to include the public with the creation of the European Citizens' Initiative, which is '*a unique and innovative way for citizens to shape Europe by calling on the European Commission to make a legislative proposal*' (European Commission, n.d.). Citizen initiatives range from projects to save bees, to calls to end the aviation fuel tax exemption in Europe (European Commission, n.d.). Thus, regulation not only influences the industry, the intergovernmental political system, NGOs and other large stakeholders. While it may not become apparent on a daily basis, it also impacts the daily life of citizens.

Due to the fact that the tasks as well as the workload of the EU expanded in the past decades, the European Commission delegates tasks to decentralized regulatory agencies to deal with regulatory evaluation and advice giving (Busuioc, 2009). In the US, these decentralized agencies also exist as political actors that are involved in the creation of legally binding regulation with executive powers (Scholten, 2014). While their roles might differ, these agencies independently attempt to shape or create regulation by implementing rules or giving expert advice to executive bodies. As non-elected bodies with executive tasks, regulatory agencies strongly focus on expertise and autonomy as pillars for their legitimacy (Ossege, 2016; Majone, 2009; Weingart, 1999). While in the US these institutions can directly influence political regulatory systems, in the EU, they might indirectly shape processes by providing advice reports and conducting peer reviews in order to deliver independent regulatory opinions (Ossege, 2016). However, since being actors in a broad political network with a variety of formal and informal audiences, the question remains how they actualize the ultimate goal of being a reputable organization with a high level of trustworthiness.

In order to understand this political struggle of regulatory agencies, various scholars have developed the theoretical conceptualization of bureaucratic or organizational reputation. The behavior of regulatory agencies, as well as the relation between the concept of bureaucratic reputation and its effects on organizational behavior of these agencies has been analyzed by various scholars (Carpenter, 2010; Carpenter and Krause, 2012; Maor, 2011; Groenleer, 2014; Busuioc, 2009; Busuioc and Lodge, 2016). This scholarship focusses on the operationalization of organizational reputation as well as relationships between this reputation and agency behavior, autonomy and accountability. Nonetheless, literature on the causal relation between organizational reputation and strategic external communication is rather limited. Despite this,

analyzing this relationship is highly significant for establishing the position of the agency within governance patterns and creating explanation for certain agency behavior (Gilad et al., 2013; Maor et al., 2012).

In order to analyze how the concepts of organizational reputation and strategic agency behavior and communication relate, certain scholars have developed frameworks to help understand strategically crafted external responses to scandals and how organizational reputation influences this (Maor et al., 2012; Gilad et al., 2013). Building on the theories of organizational reputation and strategic communication, Gilad et al. developed three distinct agency responses taking the content of public allegations into consideration. They argue that there is a variance in agency communication when it comes to allegations of underregulation and overregulation (2013). Moreover, the theory suggests that the reputational status of an agency plays an important role in an agency's decision to opt for either silence, problem denial or problem admission when reacting on scandals or crises in which communication functions as a reputation-management strategy (Gilad et al., 2013).

While the concepts of organizational reputation and risk management through strategic communication have already been outlined, in-depth qualitative research looking at the relationship between the development of organizational reputation and an agency's communication strategy during controversies is rather limited. Therefore, this research will conduct a comparative study to investigate how reputational status (developed or developing) affects agencies' external communication. This research asks the following research question: ***How does the level of organizational reputation of regulatory agencies explain their strategic communication?***

In order to answer this research question, two cases with a varying main explanatory variable, being reputational status, were selected. Agencies that have been selected are the European Food and Safety Authority (EFSA) and the US Environmental Protection Agency (EPA). While the former is argued to be having acquired a developing organizational reputation, the latter has acquired a high reputational status, being a long-established agency with strong executive authority (Rimkutė, forthcoming). Therefore, operating in the same policy area and tackling similar issues but having obtained different levels of organizational reputation, these two agencies are relevant cases to study.

Within their mandate, a mutual task of these agencies is safeguarding the environment and public health and assessing risks of current regulation within this policy area (EU, 2016; EPA, n.d.). Their policy areas are highly interesting to scrutinize since they control complex and contradictory decision-making. For instance, environmental issues as well as regulation on

pesticide use are political fields in which even sound scientific evidence can result in a variety of ideas and assessments (Rimkutė, 2018, 70-71). While one might regard a certain pesticide as safe because it allows the agricultural sector to produce commodities for a relatively low price on a large scale, another might value environmental degradation and biodiversity loss stronger and will thus plea for prohibiting the specific pesticide. These viewpoints might be based on the exact same scientific assessment, making the task of risk regulators rather complex. Nonetheless, this discrepancy in preferences of various stakeholders, despite objective scientific outcome, makes the subject of pesticides within risk regulation a highly interesting topic to study. The regulatory agencies will receive various external pressures and possible threats to their reputational status. The case of pesticides is thus an appropriate instrument to test how agencies with a varying reputational status respond to allegations and other external pressures that might potentially harm their reputation.

The scandal that will be studied is the use of Chlorpyrifos and the responses of both the EPA and the EFSA to public allegations. Chlorpyrifos has been a highly controversial pesticide since scientific evidence has proven the damaging effect on children's health (Rakoff, 2018, 4). This case has been selected because it is one of the most recent and scientifically relevant cases which has been especially salient in the US. However, the issue also resulted in political turmoil in the EU. Over the past decades, various studies have scientifically assessed the harmful results of Chlorpyrifos use on public health (IARC, 2014), resulting in EU member states and NGOs such as the PAN requesting a ban of the controversial pesticide (Rakoff, 2018). In the US, the EPA has not been proactive in banning the pesticide resulting in allegations of various stakeholders. In the EU, the EFSA has not strongly advised banning the pesticide before 2019 and the document that allowed the use of Chlorpyrifos in 2005 has still not been declassified by the European Commission (Dahllöf, 2019; European Commission, 2005). While Rimkutė thoroughly studied responses by regulatory agencies on the Glyphosate controversy (forthcoming), this study will attempt to attribute to the current field by adding a new controversial pesticide problem. Considering the controversy and current relevance of this case for the selected regulatory agencies, analyzing their communications vis-à-vis the Chlorpyrifos scandal will potentially endow the scholarship concerning bureaucratic reputation and regulatory, strategic communication.

An introduction to regulatory agencies

Regulatory agencies, since becoming increasingly important and powerful, are required to remain trustworthy actors in the political sphere (Grimmelikhuijsen et al., 2019). In democratic governance systems, independent regulatory agencies are trusted with various responsibilities to assist the federal government in the US and the Commission in the EU within the creation of regulation. The federal government as well as the Commission installed agencies in order to delegate complex political issues to area-specific departments (Groenleer, 2014). As non-elected, independent bodies, operating without political inference, the agencies are expected to follow certain procedures (Busuioc, 2009) and provide wide-ranging scientific evidence for their regulation or scientific advices (Rimkutė, 2018) while performing their tasks. Tasks within their mandate consist of ‘*standard-setting*’, ‘*information-gathering*’, and ‘*behavior-modification*’ (Busuioc and Rimkutė, 2019).

Creating regulatory agencies since 1889, the US is often regarded as the founder of the independent regulatory agencies (Scholten, 2014, 189). These federal agencies seize substantial political authority. Within the US government, regulatory agencies operate independently and are rather similar to executive bodies concerning the regulatory mandates (2014, 197). These regulation processes of independent agencies are controlled by various statutes and legal procedures which the agencies are required to adhere to. Within these guidelines and rules, agencies have the possibility to create legally binding rules and regulation. Their mandate also enables the agency to assess current policies and regulation and review their existing regulations (Weathers, 2014). Furthermore, ‘*under various congressional and presidential directives, agencies are expected to systematically review regulations to ensure they do not become outdated or overly burdensome*’ (Weathers, 2014, 6). These tasks authorize agencies to evaluate regulation in complement with developments in society.

Monitoring the effectiveness of agency regulation can be highly advantageous for future practices of the organization. With this retrospective analysis, agencies intent to measure the success of regulation. Analyzing this assists them with making decisions on future of regulation and conducting cost-benefit analyses which will eventually make agencies and their regulation more effective (Weathers, 2014). Additionally, externally publishing these evaluative outcomes in annual reports will enhance transparency and will inform the public about current and future systematic functioning of the agency. Since 2007, various federal agencies in the US improved transparency and the publishing of annual reports and regulatory evaluation. This increased transparency was perceived highly positive by the public and nonfederal institutions (Weathers,

2014, 13). Such internal improvements contribute to the agency becoming more experienced within the political network. In his book about regulatory agencies, Ossege explains that regulatory experience increases when agencies develop their practices over time (Ossege, 2016, 99). While this applies to European regulatory agencies, this is also the case for agencies in the US. Due to the fact that these US agencies have acquired a lot of regulatory experience, have been long-established organizations, known by other political institutions and the public, they have been able to establish strong levels of trust and reputation (Scholten, 2014; Weathers, 2014).

Regulatory agencies in the European Union are established more recently. Since the complexity of tasks and the scope of policy areas within the system of the EU expanded, a demand to delegate competencies to independent decentralized institutions emerged (Busuioc, 2009). Meeting this demand, the European Commission has established an agency network of 44 regulatory agencies. The EU itself regards the agencies as efficient instruments because the agencies carry out important tasks and monitor EU processes *'for only 0.6% of the overall EU budget'* (EU, 2016). With an eye on increasing efficiency of these agencies, three pillars are laid out in the Dublin Agenda. The first strategic aim consists of *'shared services and capabilities'* which stimulates EU agencies to interact and share information and resources to increase regulatory efficiency. Second, the agencies should focus on *'mutual value creation with EU institutions'* which should allow EU agencies and other EU institutions to interact and communicate their visions to create added value for the EU as a whole. Last, *'outward communication'* becomes increasingly important since it will enhance the visibility of the agency and minimize the distance between EU institutions and national actors and EU citizens (EU, 2016). According to Groenleer, *'Agencies of the European Union are supposed to provide independent expertise of a highly technical or scientific nature not readily available within the European Commission'* (Groenleer, 2014, 259). Nonetheless, this independence requires a certain level of competencies and an obligation to be accountable which is controlled by installed checks-and-balances of the European Commission on the European regulatory agency (Busuioc, 2009). While these agencies have freedom to act as experts in the field, they are expected and required to work within their mandate (Groenleer, 2014). Primarily, EU regulatory agencies should act as epistemic communities that provide expert advice to the European Commission to support policy creation (Ossege, 2016).

The tasks of these agencies in the US and EU, directly as well as indirectly, involve influencing the practices of various formal and informal stakeholders. Since these stakeholders all have various preferences that might be affected by these agencies, they will put external

pressure on regulatory agencies to make their voices heard in an attempt to impact the *standard-setting*, *information gathering* or *behavior-modification* practices of the agencies. In their interaction with formal and informal stakeholders, studies show that regulatory agencies will attempt to actively develop their distinct organizational reputation in order to match their internal preferred identity to their external perceived portrayal (Carpenter, 2010; Carpenter and Krause, 2012; Busuioc and Rimkutė, 2019). Studying the current state of the art, one can assume that their behavior is highly relevant for how political as well as non-political actors identify the agency. Assumedly, this perceived identity development is especially relevant for EU agencies. Their regulatory power is dependent on the European Commission, other EU institutions and national member state governments. The perception of these relevant actors of the organization will influence whether their advice is used for the creation of regulation (Ossege, 2016). Nonetheless, while US agencies are permitted more independent and executive authority, the effectiveness of their regulation and how the agency evaluates this is also closely assessed by other political institutions as well as the public. US agencies have to follow statutes and congressional and presidential directives and are judged on the successfulness of their regulation (Scholten, 2014; Weathers, 2014). Considering this relevance, studying the reputation of the organization is highly interesting to understand the agency's position within the political system and help understand their preferences and behavior since they operate in a political network with various actors that they attempt to satisfy. The following section will explain the theory behind organizational reputation and how its concepts link to strategic agency behavior in terms of external communication.

Theoretical framework

As previously explained, this study will test how the organizational reputation of regulatory agencies influences their external strategic responses. In order to understand the independent variable, this study will explain the concept of organizational reputation and its dimensions in detail. Additionally, the framework will show why agencies value creating and protecting their reputational status and how they manage to achieve this. When this reputational struggle of status development and protection is scrutinized, this study will theorize the dependent variable by attempting to explain how and why regulatory agencies respond to external pressures from their stakeholders within their political and non-political network.

Independent variable: Organizational Reputation

Since national and international systems have delegated authority to regulatory agencies as political, (semi-)executive bodies, their influence on governance patterns increases. However, their position in this decentralized governance can remain unclear when their status as perceived by relevant public and private audiences is ignored. Therefore, as the aforementioned literature suggests, various scholars have stressed the importance of studying organizational reputation to understand relationships between regulatory agencies and its audiences and stakeholders and their position in national and international governance structures (Carpenter, 2010; Carpenter and Krause 2012; Groenleer 2014; Busuioc and Rimkutė 2019). While institutional-choice theory suggests that the bureaucrats within these agencies will attempt to maximize their personal interest, this perception of organizational reputation goes against this by arguing that bureaucrats actually value the overall, external representation of the organization within the political and non-political network (Gilad et al., 2013, 453). By studying the theories of Noll (1958) and Olson (1995, 1996, 1997), Gilad et al. explains this by stating that *'bureaucracies carefully calibrate their response to multiple external signals from their environment in pursuit of maximizing overall support and minimizing negative feedback'* (2013, 453). This results in the suggestion that organizational reputation is a strategy for agencies to maximize positive aspects and limit negative external pressures. Considering the idea that organizations strategically attempt to create a certain image amongst their formal and informal stakeholders that matches their internal intentions, studying the notion of organizational reputation can help understand agency behavior and their strategically crafted public responses.

The concept of organizational reputation in the field of public administration can be regarded as the set of beliefs and visible practices that form the unique identity of the organization and determine the agency's position within the dynamic network of governance interactions (Carpenter, 2010; Carpenter and Krause, 2012). Since regulatory agencies fulfill a certain role with various responsibilities delegated to them, the agencies will attempt to fulfill these tasks to satisfy actors within the network. Especially when it concerns powerful stakeholders, audiences the organization is accountable to or relevant stakeholders in general. Because organizational reputation is defined by how the organization is perceived by various public, private and civil audiences (Carpenter, 2010), public organizations will aim at shaping their identity and position to increase and strongly develop its organizational reputation (Carpenter, 2010). Carpenter operationalizes the concept of organizational reputation of public agencies by distinguishing between *performative*, *moral*, *procedural* and *technical reputation*. The *performative dimension* can be developed when organizations monitor progress and successfully and efficiently behave in accordance with its competencies and goals. Moreover, for the performative reputation to be developed, organizations have to succeed in reporting their performance to its audiences (Carpenter and Krause, 2012). The *moral dimension* will most likely be developed when organizations stimulate their ethical and humane character and invest in morally important matters (Carpenter, 2010; Carpenter and Krause, 2012; Busuioc and Rimkutė, 2019, 4). The *procedural dimension*, according to Carpenter can be defined as '*an organization's legal-procedural reputation relates to the justness of the process by which its behavior is generated*' (Carpenter, 2010, 47). Last, the *technical dimension* can be stimulated when the organization has installed credible epistemic communities that strongly value scientific evidence and professional expertise and use this expertise productively within the mandate of the agency (Carpenter, 2010). An overview of these dimensions and the measures to develop the specific reputational dimension is shown in table 1.

While these concepts are not mutually exclusive, a trade-off exists in which organizations are required to balance the levels of their reputational dimensions in order to create a specific and unique reputational image amongst its formal and informal audiences. Assuming limited resources and the fact that agencies are concerned with only a few policy areas, agencies are likely to focus their endeavors on one or two reputational dimensions (Carpenter and Krause, 2012). When balancing these dimensions, agencies can plan the intended conceptualization of their identity and their core competencies resulting in strategies to successfully convey this message to relevant stakeholders (Carpenter, 2010; Rimkutė, forthcoming). Concluding from this, it becomes clear that regulatory agencies participate in a

strategic ‘reputation development’ game in which they focus their endeavors on establishing the internally desired organizational reputation. While information and other resources may be scarce, they are limited to strategically focus on one or a few of the dimensions. However, the question remains why establishing this organizational reputation is important and how agencies realize creating a strong organizational reputation.

Various scholars have stressed that, for regulatory agencies, establishing a strong reputation is highly significant due to the various positive outcomes it might have (Carpenter and Krause, 2012; Groenleer, 2014; Busuioc and Rimkutè, 2019). The position, authority and power of an organization can be strongly determined by the perception and behavior of formal and informal audiences (Busuioc and Rimkutè, 2019), which makes bureaucratic reputation of regulatory agencies highly significant for both EU and non-EU regulatory agencies. A distinct organizational reputation allows a regulatory agency to distinguish itself from other organizations and helps them provide unique services (Gilad et al., 2013, 454). Having a developed reputational status also has positive results on trust of citizen in the organization (Grimmelikhuijsen, 2019). Moreover, establishing a strong reputation might positively encourage the autonomy of regulatory agencies as well as their legitimacy to operate as safeguards in the regulatory system (Busuioc and Rimkutè, 2019). The positive influence of reputation building on autonomy is clearly visible within the structures of the EU. While the regulatory agencies remain independent and legally distinct, their advices are used for actual decision-making by the European Commission, creating a principle-agent relationship. While the agent remains autonomous, the principle oversees processes within the agency. Therefore, it is of high importance for the agencies that the Commission regards them as reputable organizations, since this might influence the extent to which they actually incorporate advice reports of the European regulatory agencies (Ossege, 2016, 39-41). Also, gaining regulatory experience, trust relationships between officials of the various EU institutions and the regulatory agencies can be strongly stimulated. When such trust relationships are installed, other institutions are proven to rely more on the advice and regulatory assessment of the agencies (Ossege, 2016, 100).

Due to the fact that agencies are expected to focus their endeavors on a few dimensions, it is relevant to predict which dimensions they will strategically be most concerned with. The first assumption is that regulatory agencies will focus on their technical reputation. When considering the tasks of regulatory agencies, it becomes apparent that these agencies have a strong scientific focus in both the EU and the US. As ‘*risk assessors*’, regulatory agencies are required to conduct scientific analysis based on solid methodology in order to objectively assess

risks (Rimkutė, 2018). Within EU regulatory agencies, national delegates are required to utilize their expertise and their membership of epistemic communities to prioritize the professional character of the agency. While the efforts of the agency officials in terms of expertise and professional peer reviews are primarily important due to their responsibilities and mandate of the agency, the expertise is also in place to *‘potentially serve the organizational self-interest’* (Ossege, 2016, 37). Therefore, it is arguable that the agency will utilize their high levels of expertise to convey a certain message to political and non-political actors. By showing that they operate under high scientific circumstances, the agency can boost its technical reputation with an aim on making them a reliable and trustworthy regulator.

Secondly, regulatory agencies will also be expected to focus on their legal-procedural dimension. In the EU, regulatory agencies are to a certain extent dependent on the European Commission, despite increasingly obtaining discretionary functions (Busuioc, 2009). The regulatory agencies operate independently and without political interference. Through the aforementioned checks-and-balances, regulatory agencies are accountable to the European Commission. By doing this, the Commission tests whether the agencies respect their independence as well as their responsibilities (Busuioc, 2009). Also applying to other national and international regulatory agencies, since being public institutions, these agencies have certain accountability expectations requiring transparency of the institution to show the public justness of processes and political behavior (Busuioc and Lodge, 2016, 247). As this notion of accountability is rather important to create trust amongst the relevant audiences, transparency and accountability endeavors become increasingly prevalent amongst organizations. Such efforts to boost accountability within a regulatory agency might go beyond their actual tasks and mandates because this focus can *‘lead to gaming, cheating and slacking, and a decline in moral responsibility and/or intrinsic motivation’* (Busuioc and Lodge, 2016, 248). Considering this, the trade-off as explained by Carpenter and Krause (2012) becomes clear. During the investment in stimulating the legal-procedural dimension of regulatory agencies, their moral and performative dimensions might receive less priority and can also be harmed by the main aim on one reputational dimension.

Concluding, the awareness of the importance of expertise and meeting responsibilities of regulatory agencies in national and supranational systems will most likely result in a strategic focus on reputational dimensions according to what links to their mandate and core tasks (Carpenter and Krause, 2012; Busuioc, 2009; Busuioc and Rimkutė, 2019). Since agencies show that there is a strong focus on (scientific) expertise (Rimkutė, 2018; Ossege 2016) and accountability and legitimacy due to meeting responsibilities (Busuioc, 2009; Busuioc and

Lodge, 2016), it is expected that regulatory agencies will prioritize the technical and legal-procedural dimensions.

Table 1: Organizational reputation and development strategies

Reputational dimensions	Developing these dimensions
Technical dimension	Creating epistemic communities and conducting careful peer reviews in which experts and scholars remain accountable to one another and advice is tested on scientific quality and objectivity of actors (Carpenter and Krause, 2012; Ossege, 2016) → developing expertise
Legal-procedural dimension	The extent to which independent agencies follow their procedures and legal processes and how their audiences perceive this (Carpenter and Krause, 2012; Busuioc, 2009) → transparency and accountability to show the agency is legitimate
Performative dimension	When organizations monitor progress and successfully and efficiently behave in accordance with its competencies and goals (Carpenter and Krause, 2012) → performance reporting, showing effectiveness in annual reports
Moral dimension	When agencies stimulate their ethical and humane character and invest in morally important matters (Carpenter and Krause, 2012). → increasing (citizen) trust by increasing moral principles

Dependent variable: regulatory agency's strategic public response

After analyzing organizational reputation and its multifaceted features, this research will address how this concept influences regulatory agency's responses amidst controversial situations. As aforementioned, scholars interested in organizational behavior attempt to show causal relationships between these bureaucratic reputation levels and complex agency behavior. An important interpretation of agency behavior concerns its external communication. In practice, agencies are required to maintain excessive relationships with either private and public actors in which both formal as well as informal interactions occur. While there are governmental guidelines regarding the distinctive sorts of public statements and outward communication to private stakeholders, regulatory agencies in both the EU and the US retain a certain discretionary space in which they can establish responses independently (Ossege, 2016; Scholten, 2014). Assuming this, the agencies possess a certain level of autonomy by which they are likely to unimpededly shape their communication and responses to its audiences and stakeholders. Therefore, the level of regulatory experience and distinctive identity development of agencies, earlier conceptualized as organizational reputation, will significantly influence the outward strategic behavior and communication of regulatory agencies (Maor et al., 2012; Gilad et al., 2013).

According to the existing scholarship concerning the influence of organizational reputation on strategic communication, one can differentiate between strategic silence and active agency response. Gilad et al. elaborate on these theoretical assumptions by operationalizing the response of regulatory agencies to public accusations. Agencies can opt for strategies in which they remain silent or actively respond to controversial allegations. Silence can be defined as intentionally deciding to refrain from responding. However, communicational strategies can also entail problem admission or problem denial. Problem admission will occur when an agency accepts the controversy and does not actively pursue ignoring its involvement in the issue. Problem admission can either occur in the form of blame shifting or full admission (Gilad et al. 2013). Moreover, problem denial is defined by Gilad et al. as '*an agency's denial that a harmful event has occurred, its denial of the significance of an alleged harm, or its justification of its (in)actions as desirable in light of public values and interests*' (Gilad et al. 2013, 455). Based on this work, strategic silence and active agency can be categorized as following (Gilad et al. 2013):

Table 2: the strategic agency responses: strategic silence or an active response

Strategic silence	Active agency response
Nonresponse: no message regarding future practice	Problem denial: message that the agency will not change its current practice
	Blame shifting: message that the agency will not change its current practice
	Full admission: message that the agency will change its current practice.

Elaborating on this framework, one can assume that regulatory agencies with a developed organizational reputation or high reputational status are leaning towards inactive responses or nonresponses towards allegations. In these cases, allegations are unlikely to harm the strong reputational status of the regulatory agency. On the contrary, agencies with a developing organizational reputation are more likely to have a very active stance because the agency has to protect its current reputation and strong critique and serious threats might further weaken its reputation (Maor et al., 2012).

First, strategic silence will be considered. Analyzing the perceived image of an agency amongst relevant audiences, remaining silent allows the organization to elaborate on statements amidst the situation and internally consider all options. Moreover, controlling utterances of the organization by remaining silent contributes to showing audiences the organization can successfully handle the situation and does not have to actively interfere to refute the current allegations (Maor et al., 2012, 585-6). Remaining silent can also show the public that the all efforts of the agency are completely aimed at solving the issue rather than investing time in carefully crafting public responses (Rimkutė, forthcoming). Studying the agency calculus of response, it is arguable that when an agency can afford it, remaining silent can be highly beneficial. First, it causes the lowest risk of reputational harm that seriously damages the bureaucratic reputation of the regulatory agency. Second, it is unlikely that the non-response will trigger public debates. Last, remaining silent to no extent allows audiences to forecast possible future performance of the regulatory agency (Gilad et al., 2013, 456). These benefits significantly contribute to the strategic pathway of the organization. When no political debate follows, operational costs and time constraints are limited, and the agency can continue its practices without having to follow up on the created turmoil (Gilad et al., 2013, 456). Considering the findings of Maor et al. and Gilad et al., the following assumptions can be constructed:

H1: An agency with a highly developed reputational status will remain silent concerning controversial situations

Second, situations in which agencies actively respond are discussed. Agencies that have a lower reputational status, often cannot afford to remain silent (Gilad et al., 2013; Maor et al., 2012). Since they might not have a distinct, shaped identity and audiences might be skeptical about their regulatory and expert performance, they have to actively demonstrate their actions have been executed within their mandate. Since the concept of organizational reputation is multifaceted and agencies are required to manage a trade-off in which they balance various reputational dimensions, agencies with a developing reputation can have functions or competencies in which their bureaucratic reputation is particularly weak (Carpenter and Krause, 2012; Gilad et al., 2013; Maor et al. 2012). When the weaker dimensions of an agency's reputation are susceptible to public attacks, an agency has to actively struggle for its survival and protect its position to prevent audiences from growing unfavorable opinions on the organization (Rimkutè, forthcoming). Additionally, as theories previously discussed show, following from the procedures and responsibilities of regulatory agencies, they might actively respond to attacks on their most valued principles. Concluding from the active protection mechanisms, it can be assumed that agencies with a developing reputational status are on a constant mission to actively improve their bureaucratic reputation. This triggers them to react to public allegations to prevent them from backsliding of their reputational status. This assumption results in the second hypothesis:

H2: An agency with a developing reputational status will actively respond to protect its reputation concerning controversial situations

Nonetheless, as the theory addresses, responses might trigger public turmoil. When agencies opt for silence, the risk of further debate and public disruption is low, since the variety of audiences do not acquire new information on which they can accuse the agency of underregulation or overregulation. When agencies decide to publicly shift the blame or deny the problem, they accept a certain risk. *'Blame shifting and to a lesser extent denial, are risky strategies inasmuch as they stimulate debate about who should be made responsible and accountable for a problem'* (Gilad et al. 2013, 455). Moreover, scholars argue that the circumstances and conditions of the allegations strongly contribute to the threat the allegation poses for the perceived reputation. When it concerns full admission of the problem, agencies might not face intense debates afterwards. However, it creates a public tendency in which the

agency is highly expected to change the current path (Gilad et al. 2013). Considering this, agencies do not only experience a trade-off in their attempts to develop their desired organizational reputation. Agencies are also amidst a strategic cost-benefit analysis in which they decide on whether to remain silent or to actively respond to a problem. When they opt for an active agency response, they have to manage the type of response while taking the possible consequences and costs of this communication into consideration.

Research design

In order to test how organizational reputation affects strategic communication, this research consists of an agency with a developing organizational reputation (the EFSA) as well as an agency with a developed organizational reputation (the EPA). As argued by various scholars studying organizational reputation, development of reputational characteristic differs depending on how relevant stakeholders perceive the agency in question (Carpenter, 2010; Carpenter and Krause, 2012; Groenleer, 2014; Busuioc and Rimkutė, 2019; Rimkutė, forthcoming). Due to the potential variance of reputational status amongst agencies, which has been emphasized by the current scholarship, this research will conduct a comparative study which will investigate how this variance influences strategic external communication. While we are aware of the difference in organizational reputation of the selected agencies, we are interested in analyzing what this means for the outcome, being strategically selected (non)responses. Therefore, a most similar system design with a selection on the independent variable will be utilized in order to explain the outcome.

Due to the difference in reputational status development of the EPA and the EFSA, the relation between communication and this organizational reputation of the agencies can be analyzed. As argued by Scholten, the regulatory system of US has been perceived as the birthplace of regulatory agencies in which federal agencies operate independently as executive authority. The position of the US agency and the scope of its regulatory power intensify stakeholders' perception of the agency as a reliable and trustworthy regulatory organization with far-reaching regulatory experience (Scholten, 2014).

On the contrary, various scholars argue that EU regulatory agencies have a developing reputational level, being agencies with emerging regulatory experience (Olsen, 2017; Ossege, 2016; Rimkutė, forthcoming). While the EFSA operates more independently from the Commission compared to more recently established EU regulatory agencies (Ossege, 2016), in contrast to the reputational development of independent US agencies, there is a strong difference in development of organizational reputation which occurs partly due to regulatory experience. Regulatory experience can be explained as growing expertise of and trust in an agency by relevant audiences (Ossege, 2016). While the EPA is argued to have obtained a high regulatory experience and strongly developed organizational reputation (Scholten, 2014; Rimkutė, forthcoming), the EFSA is still in a developing stage. Moreover, the creation of the EFSA in 2002 was the result of political controversy amidst food safety during the BSE crisis (Ossege, 2016). Therefore, political audiences might perceive the EFSA as a politicized

outcome of governmental shortcomings within the EU, rather than an independent scientific unit. Due to this significant observable difference in organizational reputation, this research will focus on these two agencies operating in similar policy areas.

Since this research attempts to scrutinize agency responses to public allegations, one has to focus on a case in which the selected agencies are publicly accused and challenged to respond. As both agencies are mandated to protect human health and carry out environmental risk assessments, pesticide controversies are highly interesting since they strongly challenge both agencies to respond as emphasized during Glyphosate allegations (Rimkutė forthcoming). Following the observations by Rimkutė on the controversy regarding Glyphosate, during periods of severe allegations concerning pesticide use and its possible effects on public health, agencies are often accused of lenient behavior and failing to protect public health (Rimkutė, forthcoming).

The recent case of Chlorpyrifos remained highly salient in both the US and the EU. Controversy arose due to the fact that the harmful effects on public health of Chlorpyrifos had already been stressed by scientists in 2000 which led to a total ban of indoor use in the US. Nonetheless, after the prohibition of the pesticide Chlorpyrifos indoor, commercial use of the harmful pesticide had not been questioned until 2017 by both the EPA and EFSA (Rauh, 2018). In the US, controversy intensified as a result of the EPA, under the lead of the newly appointed EPA Administrator Scott Pruitt, ignoring advice from the Obama office to completely ban the use of Chlorpyrifos (Lee, 2017). In the EU, regulatory action of the EFSA has been questioned by various audiences as well, since eight EU member states had already banned the use of Chlorpyrifos. The EFSA on the contrary, did not act accordingly and the pesticide endured three batches of renewal until 2019 (EFSA, 2019). Because of the salience of the issue and threats of underregulation for both cases, responses of both the EPA and the EFSA to the Chlorpyrifos controversy can be compared. Moreover, both agencies were confronted with accusations of underregulation and reluctance towards protecting public health. While these factors remain constant, the result of varying organizational reputation of the EPA and the EFSA on its responses and strategic communication can be analyzed.

Analyzing the strategic communication of both the EFSA and the EPA, various primary and secondary documents such as official agency websites, public statements, newspaper articles and scientific evidence reports will be thoroughly studied to provide empirical evidence. Studying annual reports and other communication of regulatory agencies as an instrument to measure the organizational reputation is highly relevant. Often, these agencies are strongly aware of the fact that these documents are presented to the audiences they wish to convince of

certain advices. Therefore, when studying these documents and reports, one is able to construct ideas about the strategy and organization wants to follow and what reputational aspects it values (Maor et al, 2012). Using these sources and triangulating the information, a timeline will be established through which responses of the regulatory agencies can be understood. After studying these documents, by using data triangulation, this research will test whether the agencies remain silent, or actively respond by denying the problem, shifting blame or taking full responsibility for the allegations as based on the theory established by Gilad et al. (2013).

Analysis

As safeguards assessing the risks of regulation, both the EFSA and the EPA publish peer reviews and scientific evidence reports on the risks of pesticide use. The policy areas that are strongly connected to pesticide regulation are the areas of environmental protection and public health. Creating regulation on topics as the environment and public health that will satisfy all audiences, is to a large extent unimageable. As previously addressed, these topics often involve varying preferences and interests, despite clear scientific outcomes. Therefore, the advices and regulation agencies provide on these issues are highly likely to receive public comments. This occurs due to the fact that the practices of the industry, NGOs and the public are often subordinated to the outcomes of risk assessments and regulation of regulatory agencies. Therefore, this analysis will study the various public responses and reports of regulatory agencies amidst a salient and pressing issue. Since various stakeholders challenge regulatory agencies to respond to controversies and public allegations, it is highly interesting to investigate their strategic external communication. For this study, the EFSA and the EPA are selected in order to analyze how they communicate amidst the controversial pesticide scandal of Chlorpyrifos. First, the strategic communication of the EFSA – an agency with a developing reputational status – will be assessed. Second, the strategic communication of the EPA – an agency with a strongly developed organizational reputation – will be scrutinized. This empirical analysis will concentrate on if and how these agencies respond to external pressures as a result of threats to their reputational status.

EFSA and responses to the Chlorpyrifos issue: active blame shifting and transparency

Recent developments have created an extensive public debate on the safety of the use of Chlorpyrifos. Studies have been showing the harming effects the pesticide can have on children's health since 2000 (Dahllöf, 2019). The IARC has also questioned the safety of the pesticide by granting further research on Chlorpyrifos medium priority and showing potential carcinogenic risks (IARC, 2014). Renewing the authorization of Chlorpyrifos during two batches, the Commission as well as EFSA face various threats by formal and informal stakeholders that are against the use of Chlorpyrifos. In interviews, with officials of the Pesticide Action Network Europe for instance, it becomes clear that environmental and public health stakeholders accuse the Commission as well as EFSA of prioritizing the interests of the industry and the agricultural sector (Foote, 2019; Bouma, 2019). As a result of this debate, the EFSA received a mandate by the Commission to conduct a peer review on the pesticide in order

to limit the uncertainty concerning the pesticide. In this peer review, the EFSA stressed the fact that varying scientific opinions remain present. Because of this scientific uncertainty, the agency decided to advise the Commission to ban the pesticide (EFSA, 2019). As a result of this, the industry and agricultural lobbyists accused EFSA of poor regulation and hasty decision making based on insufficient scientific evidence (Foote, 2019). Fueling the public debate, the European Commission has recently classified the report accepting the commercial use of Chlorpyrifos in 2005 (European Commission, 2005, see figure 1, Appendix). Additionally, eight EU member states have banned the pesticide nationally questioning the authorization within the EU legal system (Foote, 2019). Despite these accusations and external pressures the EFSA experiences, the extent to which the agency is actually able to influence regulation remains questionable. As this study has previously explained, the European Commission remains the actual decision-making body to which EFSA provides scientific evidence by conducting peer reviews. Taking these allegations and the possible threats to the reputation of the organization into consideration, this analysis will attempt to show how they respond to these allegations. While the agency increases its regulatory experience over time, previous research shows that the agency is still in a developing reputational phase. Following from this, the agency is expected to actively craft strategic responses to the allegations it receives in light of the Chlorpyrifos controversy.

Studying the aforementioned events, which are also visible in the timeline in table 3, one can argue that the issue is rather salient within the European political arena. NGOs as well as scientists stress the damaging effects of the pesticide on both human health and the environment. Angeliki Lysimachou, a scientist specialized in toxicology for the Pesticide Action Network (PAN) confirms this. She ensured that *'there have been two studies, as well as numerous epidemiological studies that clearly demonstrate the link between Chlorpyrifos and significant developmental and neurological issues in children, which includes memory loss, hyperactivity and lower IQ levels'* (Foote, 2019). Decisions to legally approve commercial use of the pesticide on July 1st, 2006 and the fact that the pesticide has survived three batches of renewal results in threats of underregulation for both the European Commission and the EFSA. Additionally, the lack of action is also increasing dissatisfaction of member states. With eight member-states previously abolishing Chlorpyrifos use, EU countries are alarmed by the fact that the EU is not anticipating and acting sufficiently (Foote, 2019; Bouma, 2019). Hans Muilerman of the European PAN explains in an interview, amidst the Chlorpyrifos controversy on 9 May 2019, that the competencies of the European Commission and its intermediary organizations to critically assess the risk of different pesticides have weakened over the past

under pressure of the chemical and agricultural lobby. PAN claims this after researching hundreds of internal official reports by the Commission. While processes have become more transparent after recent turmoil, PAN Europe accuses the Commission of renewing authorization of various pesticides and that until now, none of the controversial pesticides have been removed from the commercial market by first order of the EU (Bouma, 2019).

Nonetheless, various audiences operating in favor of strong agricultural businesses accuse the Commission and the EFSA of biased parameters concerning the issue. According to the consultancy firm EPPA, which operates in favor of the industry, hasty and rushed peer review conducted by the EFSA provides unjust statements on the effects of the pesticide on public health and the environment (Foote, 2019). Additionally, external pressures from NGOs also accuse DG Santé¹ and the Commission and its agencies of underregulation regarding the case of pesticide (Bouma, 2019). The Chlorpyrifos case is used by these stakeholders as a confirmation to show this perceived image of European regulation. They use the case to show a changing interest of the EU leaning towards closer ties with the industry (Bouma, 2019).

In 2017, EFSA submitted a review on Chlorpyrifos and its use on various crops. The study by EFSA stressed that further research is required to provide further information on the pesticide and its effect on public health. For certain crops on the contrary, EFSA did not determine serious problems in the use of Chlorpyrifos. Due to the variance in scientific opinions, the actual risks of Chlorpyrifos concerning the current use remains unclear according to EFSA (EFSA, 2017). Additionally, throughout the study, it is highly observable that the EFSA is rather cautious in making strong statements regarding the use of Chlorpyrifos. The cautious approach of the EFSA has subtly been developed in their use of language. Rather than using sharp phrases concerning banning the pesticide or clearly advising against or in favor, the EFSA recommends maximum residue levels of Chlorpyrifos. By doing this, they shift the responsibility away from themselves by repetitively mentioning the fact that further research is required. This is shown by phrases such as *‘Regarding main residue definition, certain tentative MRLs or existing EU MRLs still need to be confirmed by the following data’* (EFSA 2017, 23). Moreover, their prudence towards making strong statements and judging the commercial use of the pesticide in the agricultural business is demonstrated by their suggestion that every EU member state should individually assess whether or not to ban Chlorpyrifos for agricultural use (EFSA, 2017).

¹ The European Directorate-General for public health and food safety.

Assumingly, the EFSA attempts to shift actual decision-making statements away to the Commission and EU member states. Following the theory, this might have two explanations. On the one hand, it concerns the rulemaking authority of the EFSA. As literature and theories formerly discussed show, the EFSA operates under the rule of the European Commission. The EFSA does not have actual executive power and is dependent on trust relationships with other EU institutions in order to actually influence regulation. While, compared to other EU regulatory agencies, the EFSA has relatively high rulemaking authority, the agency remains a link in the chain of decision-making within the European Union. Arguably, this is one of the reasons the EFSA remains cautious to pronounce on actual decision-making regarding Chlorpyrifos authorization. On the other hand, the EFSA – in the case of the Chlorpyrifos controversy – is juxtaposed in the debate. Two pulling forces challenge the EFSA to make decisions confirming their specific preferences. NGOs and concerned citizens will accuse the EFSA when the agency would show their preferences in favor of Chlorpyrifos use. On the contrary, the industry and the agricultural lobby will threaten the EFSA when they strongly advice the Commission to ban the pesticide. Such external pressures will challenge the EFSA to protect its reputational status. By ‘*shifting the blame*’ to the actual decision-making bodies of the EU and the national governments of the EU member states, EFSA attempts to prevent their reputational status from being harmed while limiting the risks of extensive debates following decision-making and satisfying as many stakeholders involved as possible.

After publishing this review in 2017, EFSA received a mandate of the European Commission again on July 2019 to respond and provide scientific advice on the risks of Chlorpyrifos. In this statement, EFSA proposes the Commission to ban the controversial pesticide on the European commercial market after addressing the potential risks and threats of Chlorpyrifos on public health. Nonetheless, their final considerations on the toxicological levels of Chlorpyrifos remain indirect since uncertainty of the actual safety of the pesticide still remains (EFSA, 2019). Assumingly, EFSA attempts to carefully construct opinions in order to prevent stakeholder from strongly criticizing strong opinions of the EFSA due to scientific uncertainty of the safety of Chlorpyrifos. However, there is a difference in dialogue visible when studying the report of 2017 and 2019. This difference will be addressed in the discussion which is the section after this analysis.

Moreover, EFSA published multiple documents and reports to boost its transparency with clear insight in risk assessment processes. It excessively provides information and answers public questions on various topics. This has been a result of initializing the EFSA ‘PROMETHEUS’ project to increase openness and transparency, in which the agency has

declared the importance of quick responses to public questions or controversial issues. In this report, EFSA emphasizes that the initial aim is to establish a proactive stance in terms of agency responsiveness. Official statements of the EFSA are used by regulators and risk managers and therefore need to be provided as soon as possible. However, they do not ignore the fact that rather controversial issues might require a more elaborated answer. When it concerns scandals, the EFSA is expected by the public to provide wide-ranging data collections and public testimonies (EFSA, 2015, 11). Such initiatives demonstrate the willingness of the EFSA to respond to public questions since they are aware of the fact that they are a public institution serving the public good. Nonetheless, the agency is aware that it has to protect their personal reputation and might aim at strategically composing responses rather than solely focusing on fast statements.

Responding on allegations of hasty risk assessments and poor scientific reliability (Foote, 2019), EFSA has published a report on 17 September 2019 clearly describing the various processes of cumulative risk assessment of pesticide. Besides providing information on the work of the EFSA, it strategically attempts to defend itself against allegations of the industry and other actors. In studies of reputational status and strategic agency behavior, it is argued that agencies will attempt to defend the reputational dimensions on which it receives attacks. While the agency has not provided an official public statement on their website yet, the EFSA behaves in an active way responding on the Chlorpyrifos controversy. The procedural and technical reputational levels are questioned by relevant audiences such as the industry linked to consultancy firm EPPA and PAN Europe (Foote, 2019; Bouma 2019). EFSA actively defends their scientific and procedural practices by making the risk assessment procedure of pesticides increasingly transparent. Moreover, scientific accountability in terms of methodological transparency and peer accountability is also publicly justified in their FAQ section on their website (EFSA, 2019-2). Also, within their public advice reports to the Commission in 2017, they attempt to show the public that actual decision making is not legally within their mandate. By doing this, they attempt to 'shift the blame' to the European Commission and their responsibilities to national governments. Concluding from this active, strategic behavior and dialogue, the EFSA is shown to protect their legal-procedural and scientific reputational dimensions.

The EPA amidst the Chlorpyrifos controversy: strategic silence?

The controversy concerning the commercial use of Chlorpyrifos in the US is shadowed by decades of risk assessments showing doubtful results of the use of Chlorpyrifos on public health. The EPA report, 'Interim Reregistration Eligibility Decision for Chlorpyrifos', published in February 2002, already stresses the various risks of Chlorpyrifos and the effects on public health. According to the report, '*Chlorpyrifos can cause cholinesterase inhibition in humans; that is, it can overstimulate the nervous system causing nausea, dizziness, confusion, and at very high exposures (e.g., accidents or major spills), respiratory paralysis and death*' (EPA, 2002, 2). In 2016, before the presidential election, the EPA showed its preparedness to prohibit the use of multiple controversial pesticides. Declaration of this willingness led to various external pressures from agricultural organizations such as the USDA in which the risk assessment methodologies of the EPA were questioned, and they were accused of underregulation (EPA, 2016). Consequently, with the appointment of EPA administrator Scott Pruitt, former scientific peer assessments became questioned, and under his lead, the agency satisfied the agricultural and chemical industry by attempting to weaken the guidelines of safe pesticide use and allowing more pesticide to be used commercially (Rauh, 2018). The threat the EPA faced was rather salient, accusing the agency of underregulation. Making matters worse, the newly appointed official was referred to as a non-scientist. As a result of this 'non-scientific' appointment, various NGOs and the public accused the EPA of ignoring its scientific expertise and disregarding former researches and scientific peer reviews (Lee, 2017). Since the EPA has the federal mandate to regulate and control the usage of damaging pesticides, lawsuits can force the EPA to retroactively ban the use of Chlorpyrifos (Rauh, 2018). This happened on August 9, 2018. EPA reports that '*the Ninth Circuit Court of Appeals ordered EPA to ban Chlorpyrifos within 60 days. (...) After hearing oral argument on March 26, on April 19, 2019, the court ordered EPA to issue a final decision with respect to the petition objections within 90 days (...)*' (EPA n.d.). Thus, EPA was forced by federal courts to reassess the petition and its peer reviews. In April 2019, they were required by federal order to make a final decision on the use of Chlorpyrifos within 90 days. The EPA decided on extending the authorization of the pesticide until at least 2022. In this year, they will again decide on whether to ban the pesticide or to renew authorization.

As a public institution serving the public good, the EPA invests in timelines of their actions on the various policy areas within their mandate. This does show that the agency aims at being clear to the public and attempts to be transparent. However, the information is limited

to structuring information and facts about peer reviews, public reports and petitions and courts. The agency does not respond to external pressures and accusations on this page, besides simply mentioning that accusations and external pressures were present. After the ban in 2017 under the lead of Pruitt for instance, the EPA states the following concerning their 2016 Revised Human Health Risk Assessment: *'After receiving public comments on the 2014 risk assessment and feedback from the FIFRA Scientific Advisory Panel, EPA revised its human health risk assessment for Chlorpyrifos in 2016'* (EPA, n.d.). While not ignoring the fact that their decisions were controversial, they do not actually respond to this on their website.

Nonetheless, their awareness of the controversy and the public turmoil also becomes clear in their contact section on their website. The agency provides stakeholders the opportunity to ask questions by opening a point of contact only focused on one-on-one stakeholder questions regarding the Chlorpyrifos controversy. Moreover, the EPA provides access to FAQs, for which it is possible to select responses to various policy areas. When accessing the pesticide section (see figure 2 in appendix), the questions that are published on the official website are rather interesting considering the nature of the public questions on scientific reliability and processes within risk assessment on which stakeholders required transparency. Recent developments show that the technical as well as the legal-procedural dimensions of the EPA are strongly challenged. This is the result of the appointment of Pruitt, who is referred to as a non-scientist reversing former decisions of the EPA that had been made based on scientific evidence. Moreover, federal courts require to reassess their peer reviews, since these courts seriously question the quality of the assessments conducted by the EPA. Considering these developments, the fact that the EPA in this FAQ database solely attempts to answer concerns citizens might have in terms of pesticides, such as the effects of pesticides on their homes and pets are rather unexpected and irrelevant. Looking at the questions the EPA addresses (see figure 2 in Appendix), it seems like the EPA attempts aim at their moral reputation. Despite the public controversies and political and legal turmoil, the EPA invests in stimulating its humane character and by doing this, they attempt to show that they highly value citizens and their safety. The agency does not seem to grant importance to protecting its scientific and legal mandate. Relevant for this study, is to research how the EPA deals with the controversy of the pesticide Chlorpyrifos and whether they deal with this issue publicly. However, in the FAQ 'pesticide' section, the EPA does not specifically deal with questions concerning the Chlorpyrifos controversy (EPA, n.d.-2). As aforementioned, such questions are dealt with on an individual level due to the fact that the EPA opened an email specifically for Chlorpyrifos issues and questions (see figure 3 appendix). By doing this, a more personal and private conversation with

stakeholders is created. By having a more face-to-face approach, the EPA can carefully craft suitable answers and is allowed to publicly remain silent regarding the issue. For the public, it does not become clear how they answer to stakeholder questions. However, since the EPA opts for these external and public non-responses, it is not testable if and in what way EPA responds to stakeholder pressures on the individual level concerning allegations concerning the Chlorpyrifos controversy.

While EPA does not seem to actively and publicly respond to regulations on dimensions of technical and legal-procedural reputation, the EPA does behave in a defensive way when the agency is threatened by allegations that are untrue according to the agency. On its website, the EPA provides a statement in which it attempts to rectify false information that has been spread by the New York Times (EPA, 2017). The agency states the following: *‘Specifically speaking, they² left out that the EPA’s decision was upheld by the 9th Circuit Court of Appeals in San Francisco, which was not included in the story. Additionally, they took the drastic step of omitting words from the EPA’s one-sentence statement in response to their story that reminded Americans that the USDA had scientific concerns about the decision from Obama’s EPA’* (EPA, 2017). After this, the EPA repeats the statement that has allegedly been adjusted by the newspaper. Therefore, the EPA does not respond to the actual allegations of underregulation but mainly focusses on attempting to prevent the spread of *‘fake news’* on the agency.

On July 24, 2019, the EPA published the Final Order Denying Objections to March 2017 Petition Denial Order concerning the Chlorpyrifos case. This order has been published since the EPA was asked by federal court to revoke its Chlorpyrifos authorization and completely ban all commercial use of the pesticide, since the quality of its peer reviews were questionable according to the court. The court accused the agency of ignoring its mandate of safeguarding public health with the authorization of the highly controversial pesticide. Also, the agency was required to reassess the public accusations in form of a petition to ban the pesticide (Wallace and Kaufman, 2019). Within the petition, the EPA received strong allegations of poor regulation and the disability to behave in a scientifically-approved manner (EPA, 2019). While the entire judicial document is available, the EPA does not respond to allegations of ignorance of data on their website itself. Therefore, the official responses are restricted to interested audiences studying the extensive judicial document. A summary of their responses on the allegations are thus not easily accessible and are required to be understood by scrutinizing the file (EPA, 2019).

² Eric Lipton and Roni Rabin from the New York Times

Table 3: a timeline of controversy, regulatory agencies and the pesticide Chlorpyrifos

EFSA amidst the Chlorpyrifos controversy	EPA amidst the Chlorpyrifos controversy
From 2000 onward: studies start showing the dangers of the pesticide Chlorpyrifos concerning public health.	2000: the EPA bans the use Chlorpyrifos for households due to its damaging effects on children's health.
2005: European Commission accepts Chlorpyrifos on the commercial market. The document that accepted the authorization has not been declassified, resulting in accusations by various stakeholders. While this is a decision by the Commission, this creates the perception that EFSA plays a role in classifying this document.	From 2007 onwards: various audiences against the agricultural use of Chlorpyrifos start petitions and attempt to sue the EPA. According to them, the EPA violates the law with the acceptance of the use of Chlorpyrifos.
2017: EFSA conducts a peer review on Chlorpyrifos. Does not clearly give a specific advice but leaves actual decision-making up to the member states and stresses that the risks of using the pesticide in the agricultural sector remain uncertain.	2016: The EPA receives various public comments on the risk review of 2014 and acknowledges this. They respond to this in 2016 by revising the peer review. Resulting from this peer review, the EPA strongly leans towards banning the pesticide.
2017-2019: Eight EU member states ban the pesticide. While this happens, the pesticide survives two batches of authorization renewal. Currently, the pesticide is in its third renewal phase.	2017: The EPA, under the governance of Scott Pruitt, decides to reverse their decision on banning the pesticide Chlorpyrifos. As a result of this, the agency experiences serious threats to its technical reputation.
2019: Commission mandates EFSA to conduct a peer review on the use of Chlorpyrifos. EFSA advises the Commission not to renew the pesticide in 2020. While NGOs and stakeholders that want to ban the pesticide accuse the Commission and EFSA to be in favor of the industry and ignoring the salience of public health and the environment for commercial purposes, the industry sends an open letter to EFSA that accuses them of conducting insufficient peer reviews and using poor scientific methods resulting in hasty decision-making.	2017-2019: Various stakeholders start a petition requesting the EPA to revise its decision again due to insufficient scientific peer reviews. In 2018, the EPA is requested by a federal court to reassess the petition. In April 2019, the federal court requires the EPA to make a final decision within 90 days on the agricultural use of Chlorpyrifos. The EPA decides to extend the authorization of Chlorpyrifos. While the EPA states that it will continue running tests and peer reviews, they extend decision making on Chlorpyrifos until 2022. In this year, they will reassess the authorization and renew or ban the pesticide.

Sources: EFSA website (EFSA, n.d.); EPA website (EPA, n.d.); (Bouma, 2019); (Rauh, 2018); (Wallace and Kaufman, 2019).

Comparison and discussion:

Differences between the EFSA and the EPA in their external communication become clearly visible. While both agencies attempt to increase transparency to enhance and protect their technical and legal-procedural reputational status, EFSA publishes their responses to allegations of underregulation and EPA remains involved in a more personal conversation with its formal and informal stakeholders. EFSA publishes questions regarding allegations of underregulation in FAQ reports on its website (EFSA, 2019-2). On the contrary, EPA deals with such relevant public questions by referring to an email address to which questions regarding the Chlorpyrifos issue can be sent, but without actual publicly communicating answers to the questions (see figure 3 in Appendix). EPA decides to answer the questions in a more ‘face-to-face’ and personal conversation. Thus, while both parties take the time to strategically craft responses to public allegations and underregulation threats, the EFSA publishes them and increases transparency by doing this. Whether the EPA responds to all these individual questions is untestable. However, it allows them to remain silent due to the lack of public responses to questions by various formal and informal stakeholders.

Additionally, EFSA applies a rather nuanced discourse in their advice reports concerning authorization and encourages EU member states to nationally decide on the authorization of Chlorpyrifos (EFSA, 2017). While this might jeopardize their technical reputation due to the limited portrayal of self-confidence in advice-giving, they attempt to show the public that the final decision is not in their hands. To a certain extent, the agency attempts to ‘*shift the blame*’ (Gilad et al., 2013) to actual decision-making bodies, which is the Commission in this case. They allow national member states to involve in decision-making and show their value towards democratic principles and by doing this, they attempt to protect their legal-procedural as well as their moral reputational status. Therefore, the trade-off agencies are constantly involved in to balance their reputational dimensions (Carpenter and Krause, 2012) and the relationship between this reputational status and strategically crafted external responses in this case strongly becomes apparent. EFSA assesses which reputational dimensions are threatened and responds to this by providing a strategically composed public statement. Therefore, the first hypothesis that expects agencies with a developing reputational status to respond to threats to their reputational status can be confirmed. EFSA attempts to show its stakeholders that the final decision is not in their hands by ‘*shifting the blame*’ to other institutions.

The active response of the EFSA might not only be explained by the fact that the organization is still developing its reputational status which they strongly attempt to protect by transparency and blame shifting to the European Commission. Another reason that the EFSA invests in clear responses concerning pesticide issues might also be the result of the Glyphosate controversy that extensively challenged the reputation of the EFSA. During the Glyphosate issue, the IARC accused the EFSA of underregulation and questioned their scientific legitimacy. Responding on this controversy, the EFSA vigilantly crafted extensive reports that explained what happened during Glyphosate risk assessments to actively protect their reputational status (Rimkutė, forthcoming). The EFSA might have used their experience concerning the Glyphosate issue, in which the IARC accused the EFSA of underregulation. There is a possibility that because they are aware of the possible threats of allowing a controversial pesticide, the agency attempts to remain very transparent in their advice to the European Commission. Also, the analysis points out that there is a difference in the dialogue of the EFSA when comparing their 2017 and 2019 peer review. The review of 2019 was published after the agency received a mandate from the European Commission in July 2019. In July 2019, the EPA had already faced its highly controversial decision in 2017 followed by petitions and federal lawsuits. Judging on the turmoil in the US, the EFSA might have decided to change its dialogue. While the uncertainty of the risks of Chlorpyrifos in 2017 resulted in shifting of responsibility and 'blame', EFSA might have concluded that, looking at the situation in the US, such strong uncertainty implied that safety could not be guaranteed. Considering this, one might argue that the agency decided to change to a more direct dialogue.

What becomes apparent when assessing the strategic behavior of the EPA, is that the agency works to highly maintain its moral position. Theory shows that agencies would invest most in the reputational dimensions that are linked to their mandate and are thus most relevant for the agency (Carpenter and Krause, 2012). Considering this, the EPA, as a scientific expertise agency conducting peer assessments and regulating pesticide authorization on the US market, is expected to regard their technical and legal-procedural reputational dimensions as most valuable. This is strongly due to their mandate as a result of being a science-based regulator. However, on these two reputational dimensions, the agency does not craft strategic responses concerning the issue. Considering this and the existing scholarship (Gilad et al., 2013; Maor et al., 2012; Rimkutė, forthcoming), it is likely that the long-established and highly valued reputation of the independent regulatory agency does not require active defense. Nonetheless, the agency does actively respond to allegations by media that are not true according to the EPA.

In a statement on their website, they attempt to rectify statements by the New York Times that are adjusted (EPA, 2017).

When conducting research, it became clear that certain stakeholders indirectly point at the Trump administration concerning the Chlorpyrifos controversy. The fact that Pruitt, a non-scientist was appointed right after Trump succeeded Obama, fuels the public debate in which the American president is accused of disordering existing governance patterns by replacing experienced government officials with business professionals. Attorney Patti Goldman of the NGO Earthjustice stresses this by directing the allegations to ‘Trump’s EPA’. In the process of lawsuits against the EPA, Patti stated that *‘by allowing Chlorpyrifos to stay in our fruits and vegetables, Trump’s EPA is breaking the law and neglecting the overwhelming scientific evidence that this pesticide harms children’s brains’* (Wallace and Kaufman, 2019). After this research, the question remains to which extent decisions to renew Chlorpyrifos authorization were made by actual scientists or if it is the case that lobbyists managed to influence the EPA through this newly appointed Pruitt, resulting in the decision allow the pesticide. Additionally, the fact that the EPA accused the New York Times of *‘fake’* – or at least incomplete – news on their website in 2017 (EPA, 2017) is also in line with the defense the current president of the US uses.

To conclude, the main difference in the responses of the EPA and the EFSA is that the EFSA very explicitly attempts to defend itself against reputational threats on their most valued dimensions. When it concerns threats of poor regulation and allegations that attack the technical and legal-procedural reputation, the EFSA publishes reports that show their methodological practices and how the risk assessments proceed. The EPA, as a public agency with a mandate to regulate pesticides on the commercial market, invests in transparency and provides timelines and information on characteristics of Chlorpyrifos in this case. However, the agency does not seem to prioritize protecting the technical and legal-procedural dimensions which are most closely linked to their mandate by remaining silent on issues concerning these dimensions. Undoubtedly, it is not possible for the public agency to remain completely silent concerning controversial issues from which they receive external pressures that directly attack and question their mandate and due to the federal lawsuits. Nonetheless, where the EFSA actively defends its reputation, the EPA does not prioritize this defense as highly the EFSA. The FAQs the EFSA publishes respond directly to threats of underregulation and violation of EFSA’s bureaucratic reputation. The FAQs as published by the EPA, address general citizen concerns but do not tackle the issues that tackle concerns about the core-functioning of the regulatory agency. Its long-established position within the political system and its high organizational reputation

might, to a large extent, influence this stance towards public threats amidst the Chlorpyrifos controversy.

This research does possess certain limitations concerning the external validity due to the limited resources, qualitative character and time and scope of the research. Moreover, especially for the case of the EFSA, due to very recent developments, it is expectable that the agency will provide more public statements concerning the issue. The expiry date of commercial use of the pesticide has not been reached, which might result in a certain patience of the EFSA to already fully respond to the issue. Also, the issue has been more controversial in the US, since the issue connects to the bigger debate in the US concerning backsliding of expertise within the government as mentioned in an earlier segment in this discussion section. Nonetheless, while various audiences challenge both the EFSA and the Commission, it is still relevant to compare the responses of both agencies. This research shows that the EFSA constantly attempts to publish answers on their website and make procedures within the agency and its scientific methodologies as transparent as possible. The small-N characteristic of this study limits the external validity of the research, but it uncovers causal mechanisms and allows an in-depth analysis on the two selected regulatory agencies and their strategic behavior. This research attempted to explain the variance in strategic responses of agencies with different reputational standards. Due to the lack of qualitative studies that uncover the relations between bureaucratic reputation and the effects of this on agency behavior, this study pursued to contribute to the existing scholarship of organizational reputation and strategic agency behavior.

Conclusion:

As risk regulators and safeguards of regulatory processes, regulatory agencies are scientific entities that operate independently without political interference. While the responsibilities and executive power of agencies might differ, these agencies attempt to portray themselves as trustworthy and reliable institutions within the regulatory process. This is highly relevant, since this can positively affect the effectiveness and authority of the regulatory agency. This notion is conceptualized as organizational reputation. This reputation status can be developed by agencies by stimulating its technical, performative, legal-procedural and moral dimensions. How organizations score on these dimensions, depends on how they are able to shape the perceptions of their formal and informal audiences.

In an attempt to answer the research question ‘*how does the level of organizational reputation of regulatory agencies explain their strategic communication?*’, this study hypothesizes that, when facing threats to the organizational reputation as a result of threats and allegations, agencies with a developing reputational status will actively attempt to protect their current reputational levels. They will do this through problem denial, problem admission or blame shifting. On the contrary, agencies with a strongly developed reputational status, can afford to remain silence during controversies, since it will not result in extensive reputational backsliding. Remaining silent is preferable due to the fact that it will not likely result in an intensified debate and will not backfire when, retrospectively, a response appeared to be inappropriate.

In order to test these hypotheses, this study selected two regulatory agencies within the same mandate. These agencies are the EFSA and the EPA. Their mandates are interesting since they concern policy areas that will trigger public debates due to the fact that scientific evidence on these topics does not always provide unambiguous solutions. When testing agency behavior, this study selected a recent, controversial and salient issue. In both the EU and the US, these agencies were recently challenged by threats of formal and informal audiences concerning possible threats of the pesticide Chlorpyrifos. Both agencies were accused of underregulation and challenged in terms of their technical and legal-procedural reputation.

Then, this research analyzed the responses of the agency with the developing reputational status (EFSA) as well as the agency with the developed reputational status (EPA) to answer the research question. This research had to test how the variance in organizational reputation can explain the strategic agency communication. This was done by opting for a most similar system design with a selection on the independent variable. While independent variable

of organizational reputation was known when starting this research, the outcome still had to be studied by conducting a comparative analysis.

Looking at the behavior of EFSA amidst the Chlorpyrifos controversy, the second hypothesis³ cannot be falsified. This hypothesis expects that agencies with a developing reputational status will actively craft strategic responses in order to protect their developing reputation and to prevent it from backsliding. EFSA attempts to show its stakeholders that the final decision is not in their hands by ‘*shifting the blame*’ to other institutions. Also, the developing reputational status of the EFSA can explain that the agency responds to threats to its legal-procedural and technical dimension. The agency responds to allegations of poor scientific peer reviewing by publishing reports on the scientific processes and publicly responding to pesticide and Chlorpyrifos FAQs on its website. Theory suggests that they invest in this due to their developing reputational status and the fact that they have to protect the current reputational status.

The EPA, on the contrary, shows less interest in actively protecting its legal-procedural and technical reputation. Despite receiving threats on these two reputational dimensions in the form of petitions and federal lawsuits, the agency opts for a personal conversation with stakeholders rather than public statements. Their long-established agency with high levels of regulatory experience resulted in a strongly developed organizational reputation. Due to this strongly developed reputational status, the EPA can afford to remain silent on the legal-procedural and technical dimensions to limit further debate concerning the controversy. Thus, the first hypothesis⁴ cannot be completely falsified. However, the agency does respond to moral questions regarding Chlorpyrifos and pesticides in general which is not expected when studying the existing framework. Moreover, the agency immediately responded to newspaper accusations that were false in their opinion which also assumes that they aim at protecting certain moral/ethical values.

³ **H2: An agency with a developing reputational status will actively respond to protect its reputation concerning controversial situations**

⁴ **H1: An agency with a highly developed reputational status will remain silent concerning controversial situations**

Appendix

Figure 1: Classified EU authorization for Chlorpyrifos



EUROPEAN COMMISSION
HEALTH & CONSUMER PROTECTION DIRECTORATE-GENERAL

Directorate D - Food Safety: Production and distribution chain
Unit D.3 - Chemicals, contaminants and pesticides

Chlorpyrifos
SANCO/3059/99 - rev. 1.5
3 June 2005

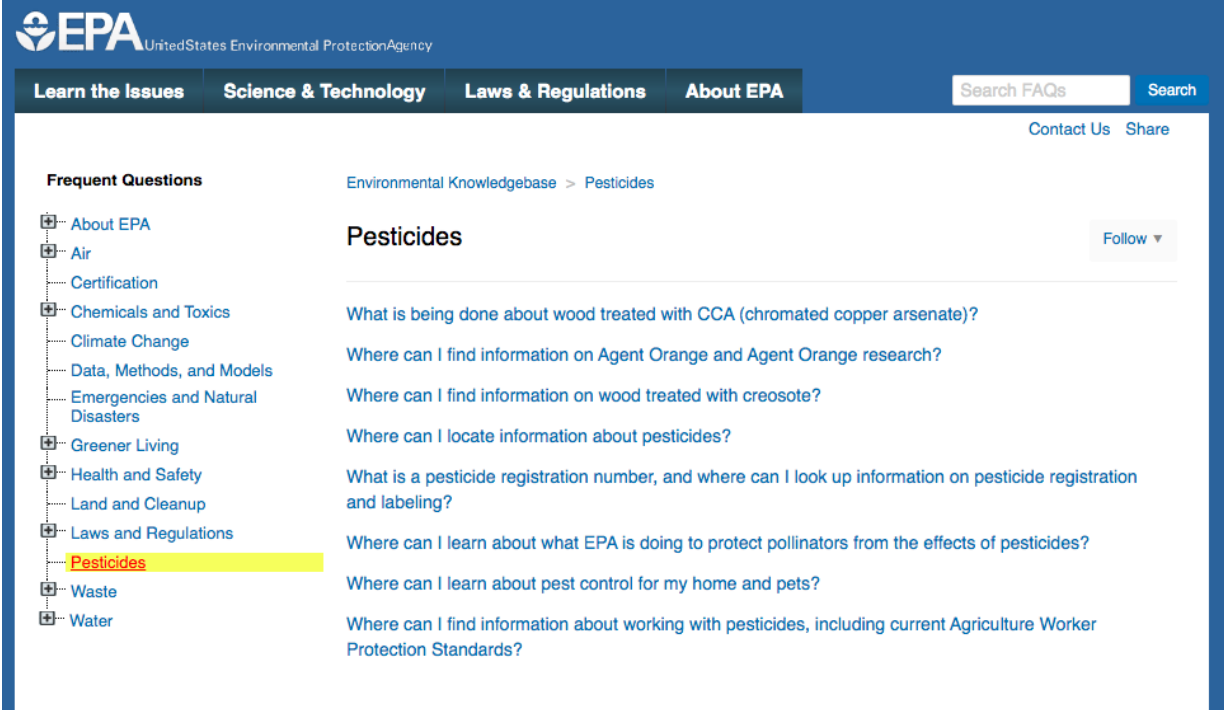
EU RESTRICTED

**COMMISSION WORKING DOCUMENT - DOES NOT NECESSARILY
REPRESENT THE VIEWS OF THE COMMISSION SERVICES**

FINAL

Snapshot from official document, retrieved from <https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=activesubstance.detail&language=EN&selectedID=1130>

Figure 2: The FAQs published by EPA regarding pesticides



The screenshot shows the EPA website's 'Frequent Questions' section for Pesticides. The left sidebar lists various topics, with 'Pesticides' highlighted in yellow. The main content area is titled 'Pesticides' and includes a 'Follow' button. Below the title, several questions are listed, such as 'What is being done about wood treated with CCA (chromated copper arsenate)?' and 'Where can I find information on Agent Orange and Agent Orange research?'. The EPA logo and navigation menu are visible at the top.

Snapshot from the official EPA database, retrieved from <https://publicaccess.zendesk.com/hc/en-us>

Figure 3: Contact Us for Chlorpyrifos questions



The screenshot shows the EPA website's navigation bar with links for 'Environmental Topics', 'Laws & Regulations', and 'About EPA'. A search bar is present on the right. Below the navigation bar, the page title is 'Contact Us about Ingredients Used in Pesticide Products'. The main content area includes a welcome message, a 'Report a Violation' link with a corresponding icon, and contact information for questions and comments. The contact information includes an email address and a telephone number. A URL is provided at the bottom of the page.

EPA United States Environmental Protection Agency

Environmental Topics Laws & Regulations About EPA Search EPA.gov

Related Topics: [Ingredients Used in Pesticide Products](#)

Contact Us about Ingredients Used in Pesticide Products

EPA welcomes your comments, especially comments on how we can improve our website. We strive to respond to every comment with an answer or an appropriate referral as quickly as possible.

Report a Violation
Report possible violations of environmental laws and regulations.

Send us your questions or comments:

For information related to chlorpyrifos and the denial of the PANNA and NRDC petition to ban chlorpyrifos:

- Email address: OPPChlorpyrifosInquiries@epa.gov.
- Telephone number: (703) 347-0206.

Snapshot from official EPA website, retrieved from <https://www.epa.gov/ingredients-used-pesticide-products/forms/contact-us-about-ingredients-used-pesticide-products>

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