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Using Lenses to Understand Policy Failures: The Case of the 2012 Census in Chile

M. Angélica Pavez

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USING LENSES TO UNDERSTAND POLICY FAILURES
THE CASE OF THE 2012 CENSUS IN CHILE

A Dissertation Presented
by
M. ANGÉLICA PAVEZ

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University of Massachusetts Boston,
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ABSTRACT

USING LENSES TO UNDERSTAND POLICY FAILURES
THE CASE OF THE 2012 CENSUS IN CHILE

August 2020

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Policy failures are controversial, costly, and above all, messy. More often than we wish, what begins as a well-intentioned policy becomes a failure. In all countries and policy areas, some initiatives end up failing miserably, wasting resources, creating endless political struggles, and even affecting countries' governance. However, the perceptions and understanding of failure are dissimilar. Different actors, including researchers, have diverse and indeed conflicting viewpoints of what constitutes failure, its characteristics and avenues of resolution. The growing policy failure literature offers concepts and models to approach this elusive phenomenon, emphasizing the critical role of social perceptions, characteristics
of failure episodes, multiple dimensions, and the wide and complex spectrum between failure and success.

This study recognizes the multifaceted nature of policy failure as a starting point. Based on the existing literature, and assuming there are always different perspectives or "lenses" involved, this dissertation proposes the Lenses Framework as a novel approach to explore the understanding of policy failure, by analyzing the case of the 2012 census in Chile.

In 2012, the National Statistics Institute (INE) conducted the census under a new methodology, and what could have been a significant advance on data quality and efficiency became a huge controversy. The census had significant implementation problems, low coverage, accusations of data mishandling, several investigations to assess the errors, and endless political and technical disputes, all of which ended with discarding the census and conducting a new census in 2017.

By using the policy, organizational, and societal lenses, the analysis reveals the different angles of understanding the causes, characteristics and interpretations of the census failure. The policy lens emphasizes the abrupt change of census strategy, the troubled implementation, and differing evaluation criteria. Instead, the organizational lens exposes difficulties in INE's structure, leadership weakness, internal disagreements, and other escalating struggles. In turn, the societal lens unveils the institutional context, political turmoil, the rising power of social media, and the student movement's strength with the profound clash of ideas at stake. Like this, the Lenses Framework tackles the policy failure's messy character, providing new insights for a meaningful, but also helpful, understanding of this complex phenomenon.
RESUMEN

Los fracasos de políticas públicas son controvertidos, costosos y, sobre todo, enredados. Más a menudo de lo que quisiéramos, lo que comienza como una política bien intencionada se convierte en un fracaso. En todos los países y áreas de políticas, algunas iniciativas terminan fracasando miserablemente, desperdiciando recursos, creando interminables disputas políticas e incluso afectando la gobernabilidad de los países. Sin embargo, las percepciones y la comprensión de los fracasos de políticas públicas son muy diferentes. Los distintos actores, incluyendo a los investigadores, tienen puntos de vista diversos y e incluso contradictorios sobre qué constituye fracaso, sus características y las vías de solución. La literatura sobre fracaso de políticas públicas ofrece conceptos y modelos para abordar este escurridizo fenómeno, destacando el papel clave de las percepciones sociales, las características de los episodios de fracaso, las múltiples dimensiones, y el complejo y amplio espectro que existe entre el fracaso y el éxito.

Este estudio reconoce la naturaleza multifacética del fracaso como punto de partida. En base a la literatura existente y asumiendo que siempre hay diferentes perspectivas o "lentes" involucrados, esta disertación propone el análisis a través de Lentes, o Lenses Framework, como un enfoque novedoso para explorar la comprensión del fracaso de políticas públicas a través del estudio del caso del censo del 2012 en Chile.

En el año 2012, el Instituto Nacional de Estadísticas (INE) llevó a cabo el censo bajo una nueva metodología, y lo que debería haber sido un avance significativo en eficiencia y calidad de los datos, dio lugar a una gran controversia. El censo tuvo significativos problemas de implementación, baja cobertura, acusaciones de manipulación de los datos, varias investigaciones para evaluar los errores, y un sinfín de controversias políticas y
técnicas, todo lo cual terminó con el descarte del censo y la realización de uno nuevo en 2017.

A través del uso de lentes de políticas, organizacional y societal, el análisis revela distintos ángulos de comprensión de las causas, características e interpretaciones del fracaso del censo. El lente de las políticas enfatiza el cambio abrupto de metodología del censo, los problemas de implementación y las diferencias en los criterios de evaluación. En cambio, el lente organizacional expone las dificultades en la estructura del INE, la debilidad del liderazgo, los desacuerdos internos y disputas cada vez más intensas. A su vez, el lente societal devela el contexto institucional, la crisis política, el creciente poder de las redes sociales y la fuerza del movimiento estudiantil con el profundo choque de ideas en juego. De esta forma, el análisis a través de Lentes o Lenses Framework enfrenta el carácter enredado de los fracasos de políticas públicas, entregando nuevos aportes para una comprensión significativa, pero también útil, de este complejo fenómeno.
I want to thank the people and institutions that made this dissertation possible.

Many thanks to Steven, my husband, and adventure partner. Thank you for your love, for accompanying and pushing me, and also for your infinite patience. To my daughters Catalina, Bárbara and Fernanda, the great women of my life. You inspire me, you challenge me and always show me new perspectives.

I am very grateful to all my professors, who nourished my intellectual curiosity. Most especially thanks to Michael Johnson, Amy Smith and Jeffrey Prottas from whom I learned so much, thank you for your challenging questions, wise advice, and constant support.

I also thank all those organizations that supported my doctoral studies and this dissertation. To the public policy Ph.D. program at the great UMass Boston, the research scholarship program that helped fund my fieldwork, and especially thanks to the BecasChile scholarship program.

To all my friends and colleagues. Thank you to all with whom I shared a coffee, a dream, or a conversation about this dissertation and its nuances. We talked about the different lenses of observation, the nature of error and learning, or the gap between academia and policymaking. Thanks to all those who still believe that it is possible to learn from our mistakes and that it is feasible to build better, fairer, and more equitable societies.
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<tr>
<td>ADP</td>
<td>Senior Public Officials Selection System (Alta Dirección Pública)</td>
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<td>ANFINE</td>
<td>National Association of Public Officials of the National Institute of Statistics (Asociación Nacional de Funcionarios del Instituto Nacional de Estadísticas)</td>
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<tr>
<td>CASEN</td>
<td>National Survey of Socioeconomic Characterization (Encuesta de Caracterización Socioeconómica Nacional)</td>
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<tr>
<td>CDE</td>
<td>Council for the Defense of the State (Consejo de Defensa del Estado)</td>
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<tr>
<td>CELADE</td>
<td>Latin American &amp; Caribbean Demographic Center (Centro Latinoamericano y Caribeño de Demografía)</td>
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<tr>
<td>CIPER</td>
<td>Journalism Research and Information Center (Centro de información e investigación periodística)</td>
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<td>CLAPES</td>
<td>Latin American Center for Economic and Social Policies (Centro Latinoamericano de Políticas Económicas y Sociales)</td>
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<tr>
<td>CPCS</td>
<td>Census Progress Control System (Sistema de Control de avances del censo)</td>
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<tr>
<td>ECLAC/CEPAL</td>
<td>The United Nations Economic Commission for Latin America and the Caribbean (Comisión Económica para América Latina y el Caribe)</td>
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<tr>
<td>ENE</td>
<td>National Employment Survey (Encuesta Nacional de Empleo)</td>
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<tr>
<td>ENUSC</td>
<td>National Urban Survey on Citizen Security (Encuesta Nacional de Seguridad Ciudadana)</td>
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<tr>
<td>EUROSTAT</td>
<td>European Union Statistical Office</td>
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<tr>
<td>HDI</td>
<td>Human Development Index</td>
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<tr>
<td>INE</td>
<td>National Institute of Statistics (Instituto Nacional de Estadísticas)</td>
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<tr>
<td>IADB/BID</td>
<td>Inter-American Development Bank (Banco Inter-Americano del Desarrollo)</td>
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<tr>
<td>NNIM</td>
<td>Nearest Neighbor Imputation Methodology</td>
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<tr>
<td>OECD/OCDE</td>
<td>Organization for Economic Co-operation and Development (Organización para la Cooperación y el Desarrollo Económicos)</td>
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<tr>
<td>OLAC</td>
<td>Latin-American Observatory of Censuses (Observatorio Latinoamericano de Censos de Población)</td>
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<tr>
<td>PDA</td>
<td>Personal Digital Assistant</td>
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<tr>
<td>SERVEL</td>
<td>Electoral Service (Servicio Electoral)</td>
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<td>SII</td>
<td>Internal Revenue Service (Servicio de Impuestos Internos)</td>
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<tr>
<td>SOCHE</td>
<td>Statistics Chilean Society (Sociedad Chilena de Estadística)</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNDP/PNUD</td>
<td>United Nations Development Program (Programa de Naciones Unidas para el Desarrollo)</td>
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CHAPTER 1
INTRODUCTION

1.1. The Census

Censuses are one of the oldest public instruments in existence. There is evidence that ancient civilizations such as the Egyptians, Babylonians, Romans, or Chinese regularly conducted censuses for military, tax, labor, or land distribution purposes (Thorvaldsen, 2017). Today, every national government is responsible for undertaking its census at least every ten years, and in 2010, 214 countries conducted censuses (UN, 2015).

The census is not simply a statistical exercise towards quantitative aggregates, but aims at a qualitative listing of persons (Thorvaldsen, 2017). In fact, the word census comes from the Latin word “censere”, which means to assess, to estimate (Valente, 2015). Therefore, in addition to answering the question of "How many are we?" A census seeks to answer the questions of "Who are we?" and "Where do we live?" which involves counting and characterizing the population within the territory (UN, 2017). Thus, the purpose of the census is to provide vital information on the size of the country, the socio-demographic characteristics of the population and spatial distribution.

The census has a strategic role for countries, as it provides essential information for policymaking, administration, planning and allocation of public resources. The census is also the basis for the analysis and appraisal of the composition, distribution and growth of the
country's population. It provides the basic sampling framework for other studies and statistical products as necessary as price indices, growth or unemployment (UN, 2017). Given this importance, all social actors in a country, benefit from good quality of census data, including government, academia, companies, civil society, and individuals.

There is a widespread notion that a census is an elementary exercise, as it requires gathering the same information from everyone. However, a census is a highly complex administrative, logistical and statistical task, that “consists of a complex series of interrelated steps, and constitutes perhaps the single most extensive, complicated and expensive operation that a country undertakes” (UN, 2017, p. 31).

1.2. The Census in Chile, a Case of Policy Failure

Like most countries in the world, Chile undertakes its census every ten years. In 2012, the National Statistics Institute (INE) conducted the census under the de jure strategy, counting over three months with professional surveyors, instead of conducting the census under the usual de facto strategy, a single day’s counting done by volunteers. What resulted was arguably the most controversial census in Chilean history. Actors from political, social, and academic realms differed on the quality of the data collected and its usability; while for some of them, the census policy was a failure, for others, it was indeed a success. High media coverage reported accusations of data mishandling, authorities’ resignations, apologies from the President, many inquiries for assessing the census, and an endless political struggle, all of which ended up declaring the 2012 census invalid. Finally, in the context of a new government, the INE carried out a new census in 2017, this time coming back to the traditional de facto modality.
However, was the 2012 census a failure? While the 2012 census was widely deemed unusable, significant political motivations led to that judgment. Failure for whom? Authorities, politicians, policymakers, experts, citizens, and so too the researchers, have different and even conflicting views about what the census failure meant, its causes, its characteristics, and its solutions. The criteria for evaluating and judging the 2012 census as a failure are confusing and diverse. While for some actors, it was a failure because of low coverage, yet for others, it was because the expectations were too high. Others attributed the failure to the poor quality of the data collected, the political tensions, or the lack of participation, to name a few of the several criteria at stake. So, how do we understand failure? When facing policy failures, there are several questions with no clear answer. Indeed, some of the most prominent characteristics of policy failure are the multiplicity of perspectives on failure and disagreement on the assessment criteria.

The causes and characteristics of any policy failure are divergent because policies can fail in such a diversity of ways. Some policies fail—to name a few reasons—because they did not achieve the expected goals, did not get stakeholders’ support, did not reach equity criteria, or because, compared to similar policies, the outcomes were considered inadequate (Marsh & McConnell, 2010; McConnell, 2010a). As a result, when a policy failure happens, the range of reactions is vast. Different actors clamor to find someone to blame, search for the overarching ignored signs, the critical points at which failure could have been foreseen or avoided, or even ask why policymakers did not react in time (Bovens & ’t Hart, 1996; McConnell, 2015). After all, policy failures undermine public resources; they entail exorbitant costs. Not just from the failure event itself, but because of the enormous amount of resources, time, and energy exhausted to overcome the failure, the concomitant controversy,
and the quest for solutions. Thus, the damage of failure goes beyond the limits of policy goal achievement; it generates endless political turmoil, becoming a threat to the government’s legitimacy or even causing a governance crisis (McConnell, 2010a, 2015; Schuck, 2014).

In Chile, a developing country with a reputable statistical institution, the new census methodology should have meant a major improvement in data quality and the efficiency of the census process, instead, it led to a growing controversy with technical and political overtones. However, the census in Chile was not the only policy that has failed. More often than we wish, what begins as a well-intentioned policy becomes a failure, fiasco, or disaster. Whether census, tax reform, transportation, health, housing, education, and many others, in different parts of the world, public policies do fail. As with the census, policy failures are controversial, costly, and above all, messy.

1.3. Policy Failure in the Literature

The interest in policy failure arises from varied backgrounds and disciplines—political science, sociology, public management, organizational theory—which helps to explain the diversity of perspectives, methodologies, and levels of analysis. Likewise, literature has studied this phenomenon under different designations, including policy failure (McConnell, 2010a, 2015; Howlett et al., 2015; Bovens & ’t Hart, 2016), policy disasters (Hall, 1982; Dunleavy, 1995; Bovens & ’t Hart, 1996), policy fiascoes (Janis, 1982; Bovens & ’t Hart, 1996; Oppermann & Spencer, 2016a), policy blunders (Nutt, 2002; King & Crewe, 2013), government failures (Light, 2014; Schuck, 2014), and governance failures (Bovens, ’t Hart, & Peters, 2001; Howlett et al., 2015; Peters, 2015). Beyond the terminology, these
approaches share a common concern over why some policies that seem to have proper conditions for success end up failing, generating negative consequences.

Policy failure is an intriguing area of study because the notion of failure itself is contested; the whole process of diagnosing and remedying failures yields multiple narratives. Different actors, including researchers, address the failure event, from their backgrounds, biases, and particular epistemologies (Bovens, 1995). The complexity of policy failure lies in the classical epistemological tension within the social sciences between positivist and interpretivist perspectives (Marsh & Furlong, 2002). While a positivist perspective understands policy failure as an observable and measurable fact—according to different assessing criteria—the interpretivist understands it as a social construction. Therefore, failure is not objective but "is in the eye of the beholder." In this way, when facing policy failure, there are not definite benchmarks to assess failure, but many disputed explanations.

The literature on policy failure has been fruitful in recent decades. On the one hand, there are many and varied case studies that delve into the characteristics, tensions and effects of the failures. On the other hand, some models of analysis endeavoring to address the elusive and complex nature of the policy failure phenomenon. Of all the contributions, there are three particularly significant for this dissertation. The first is the social construction perspective, which emphasizes the role of perceptions on failure judgment. From here, failure is not something omnipresent or "objective," but the product of a complex process of construction and negotiation of meanings (Bovens & ’t Hart, 1995, 1996, 2016). This dissertation incorporates the role of judgments about failure as central to its construction and characteristics. The second is the revitalizing and recent literature that recognizes the epistemological and methodological challenge to study policy failures. Policy failure is not
black and white, not outcomes versus perceptions, or failing versus achieving, and accordingly, this literature offers heuristic frameworks for understanding the grey area between failure and success (Marsh & McConnell, 2010; McConnell, 2010a, 2010b; Howlett, 2012). This dissertation shares this view of policy failure as convoluted and multidimensional, but it does not venture to model or simplify, but assumes the complex character of policy failure as a starting point. A third contribution points to the broader perspective, emphasizing the contextual elements on policy failure, because failures occur within cultural, economic, institutional, and social contexts (Hindmoor & McConnell, 2013, 2015; Peters, 2015; van der Steen et al., 2015). These broader elements' role on policy failure is something slightly considered by the literature, and where this dissertation places particular emphasis.

Despite advances in policy failure studies have been noteworthy, the research is still linear and relies on a mechanical comprehension of policy failure. There is a bias toward searching for causes and not paying attention to relationships between levels of analysis, different viewpoints involved, or the context within which the policy is embedded. Besides, while research on this topic shares the aim of improving policymaking, there still a challenge toward translating the complex analytical keys of policy failure to courses of action useful to policymakers. To address policy failures is a challenging venture. As with the 2012 census episodes of failure are, in a word, messy. There are different understandings of failure, different perspectives, and a need for comprehensive approaches to address complex policy problems. This dissertation aims to contribute to this field by deepening the understanding of policy failures' convoluted nature, within the broader context, and seeking ways to address policy failure in a way that is more useful to policymakers.
yardsticks to measure them, the dispute between narratives, and above all, diverse interpretations of the causes, characteristics, and consequences of a failure event. Based on the advances in policy failure literature, and assuming its multifaceted and multi-perspective nature, this dissertation does not propose another model or a new theory, but explores different perspectives for understanding policy failures through the study of the 2012 census in Chile.

1.4. Lenses Framework to Understand Policy Failure

The primary research question of the dissertation is: How do we understand policy failure? This research question yields two secondary questions: First, how do various lenses/perspectives understand policy failure differently? And, how does a multi-lens approach contribute to a better understanding of policy failure?

Based on the existing literature, this dissertation proposes a novel analytical approach for understanding policy failure to answer the research questions: the Lenses Framework. The Lenses Framework is an analytical exercise that examines the same case from different lenses or perspectives, and involves two steps. The first step of the framework is the separate analysis of the policy failure case under the following three perspectives: policy, organizational, and societal. Each lens provides a particular understanding of policy failure. Thus, the Policy Lens analyzes the case from concepts and distinctions related to the policy process, focusing on the stages of formulation, implementation, and evaluation of the census. Likewise, the Organizational Lens analyzes the dynamics and institutional and organizational arrangements of the agency responsible for carrying out the census. Finally, the Societal Lens observes the broader context of the failure case, analyzing the political and social dynamics.
of the society. The second step of the framework investigates the census case from a multi-lens perspective. This step gathers the respective understandings from the individual lenses and then examines the relationship amongst those three lenses for a more thorough comprehension of the failure.

This dissertation offers the Lenses Framework as an analytical device to tackle the mentioned epistemological conundrum over policy failures to improve the understanding of the levels/dimensions of policy failure. Due to the lens-by-lens or level-by-level analysis, and then through the second step’s integrated analysis, the dissertation provides the opportunity to comprehend the policy failure phenomenon in a better way.

To answer the research questions listed above, this dissertation stands from a case study as a comprehensive research strategy (Stake, 1995; Yin, 2014) to examine in-depth the case of the 2012 census in Chile. From a qualitative approach, the study relies on a thorough analysis of secondary information (reports, assessments, media) as well as 50 in-depth interviews with policymakers and stakeholders linked to the census case.

1.5. Academic and Policy Contributions

This dissertation contributes to the scholarly literature by offering the Lenses Framework for future analysis of policy failures. By embracing the epistemological tension of the policy failure, the Lenses tackles its multidimensional and messy nature, without falling into causal explanations or simplifications. Also, the Lenses has methodological advantages, because, through the use of separate lenses, with well-defined concepts, it lays a route for studying cases of policy failure. By incorporating an institutional and contextual
dimension through an observational lens, this study helps overcome previous weaknesses about the role of the cultural, social, and institutional context on the policy failure.

Furthermore, the case of the 2012 census has great teaching potential. The exercise of analyzing through lenses allows epistemological distinctions and encourages reflection on the ways of understanding and examining social reality. This is fostered by the study's methodological approach: the case study. Thus, through a rich narrative of events, circumstances and perspectives, the case enables the readers to ask questions, to form their own interpretations, and especially to transfer information from the case to other settings. The study promotes a reflection beyond the case, allowing students and policymakers to reflect on their perspectives and practices.

Likewise, this dissertation of the Chilean census case contributes from the Latin American perspective to a stream of research on policy failure that comes from developed countries. Last, this dissertation has great teaching potential, because of its methods’ features and epistemological richness, the census case is suitable as a teaching case for students and policymakers.

Besides, this dissertation provides policy contributions. It is difficult for policymakers to learn from past mistakes, they do not have the time or the incentives. However, policy failure results in sometimes extravagant expense and damage, and therefore in order to correct policy failure and overcome the crisis, policymakers need to understand them. Thus, the Lenses Framework is an invitation to policymakers to explore different perspectives and levels of policy failure to better understand them, without forcing a causal analysis or falling into highly academic concepts. So, gaining a deeper understanding of policy failure, its sources, and characteristics increases the ability to learn from what happened, helping
policymakers to correct their mistakes, prevent further failures or better handle failure events. Therefore, the Lenses Framework seeks to bridge between the theoretical richness about policy failure with insights about actual policymaking. Ultimately, this dissertation provides recommendations for the National Institute of Statistics and census policy.

1.6. Structure of the Dissertation

This dissertation is structured in ten chapters. After this introduction, Chapter Two presents an extensive literature review on policy failure. Chapter Three introduces the research questions and the Lenses Framework proposed in this dissertation. Chapter Four describes the data and methods of the study, including sources of information, characteristics of the interviews, the analysis performed, and the overall research design. The heart of this dissertation is Chapter Five, which narrates the failure of the 2012 census in Chile throughout a dense description of events, actors, and circumstances. According to the Lenses Framework, Chapters Six, Seven, and Eight present a separate analysis of the census case from the policy, organizational, and societal lenses, respectively, observing how each lens provides different takes and insights. Based on the analysis of the previous chapters, Chapter Nine offers a multi-lens analysis of the failure case from the above findings. Finally, Chapter Ten provides the conclusions of the study, including the academic and policy contributions of the dissertation and future research opportunities for policy failure.
CHAPTER 2
UNDERSTANDING POLICY FAILURE. LITERATURE REVIEW

Policy success and failure have been addressed from different backgrounds and disciplines—political science, sociology, economics, public management—which explains why there is such a multiplicity of perspectives, methodologies, and levels of analysis. This section reviews relevant literature on policy failure. First, it describes how policy and social sciences have been addressing the idea of failure and success. Next, it presents analytical frameworks that explicitly tackle the policy failure phenomenon. Third, it analyzes several common characteristics of policy failure in the literature. Fourth, it reviews the link between policy failure and learning from failure. And finally, it offers a summary of the most significant contributions of the literature, highlighting the critical elements for this dissertation.

2.1. Failure and Success in Social Sciences

The idea of policy success and failure has evolved significantly over the past 40 years. Social and policy sciences, although not explicitly, have addressed the issue of policy failure through different perspectives. Within the context of the epistemological complexity involved in policy failures, this section presents how the idea of failure has developed in the policy sciences and policy literature, including concepts and theories such as: public policy
as a two-stage process, incrementalism, policy process, implementation, evaluation, as well as a diverse literature addressing policy failure cases.

What do we mean by policy failure? How do we measure failure? How do we perceive failure? Who defines an event as a failure? These questions and their answers are deeply rooted in epistemological assumptions about social reality and often express the existing tension between alternative perspectives to understanding policy failure (Marsh & Furlong, 2002; Stone, 2002). In the positivist-rationalist tradition, policy outcomes can be observed and measured, meaning that it is possible to assess a given policy or program against a chosen goal or standard, usually defined to be the program’s or policy’s goal. This notion implies that, when problems are detected, it will be possible to correct the faults. In the interpretivist-constructivist tradition, the reality is not observable but perceived and interpreted in a process of construction of meaning.

Moreover, the concepts and words ‘success’ and ‘failure’ express certain ways of thinking. While the success term has a clear future orientation—actions towards certain benefits—the term failure is a retrospective judgment of policies or strategies that did not achieve expected results. And thus, “failure is a pejorative term applied to measures that were originally formulated with an intended successful outcome in mind” (Little, 2012, p. 16). Thus, the meanings and emotions associated with the terms success and failure are significant and permeate how citizens and policymakers address policies.

The determination of a policy as a success or failure is a complicated process of negotiating meanings and positions. As said by Yanow (2000), "contending frames entail not just different policy discourses—different languages, understandings, and perceptions—and potentially different courses of action, but also different values, and different meanings" (p.
This tension between “objective” failure and “constructed” failure has been critical in the way the literature has addressed policy failure, and still is critical. The very complex nature of the policy failure topic is deeply rooted in the idiosyncratic and pluralistic nature of policy sciences (McConnell, 2015).

**Policy Process**

The simplest approach to policy failure is based on the notion of policymaking as a two-stage process, the formulation and the implementation of the policy, a conception that still is very ingrained in the general public perception of how policies work. Under this perspective, policy failure is understood as the disparity or lack of coordination between the designed goals and their achieved outcomes (Howlett, 2012). Therefore, it is possible to identify the type of failures according to which part of the formulation–implementation dyad is deficient. When the policy formulation is rigorous, well executed, but still not able to achieve the goals, it is considered a "policy anomaly," a rare situation or exception because there is no clarity as to why it did not work. When a sound plan is not implemented correctly, this is considered a "policy accident" because something occurred that impeded achieving the expected results. When the execution of a policy is adequate, but the original plans were inadequate, it is a "policy mistake," one that shouldn’t have been carried out; finally the last category of "policy fiasco" result from both poor formulation and poor implementation of the policy, leading to disastrous results that extend beyond the policy itself (Bovens & ’t Hart, 1996; Howlett, 2012; Howlett et al., 2015). From this two-step conception, once the cause of the problem is identified, it is possible to correct and generate mechanisms to prevent it from happening again.
However, the challenges of policymaking, in particular the idea of failure, go far beyond misalignment of formulation and implementation of the policy. Unlike the previous approach, process, or policy cycle literature contemplates a more complex perspective. The heuristics of the policy cycle' approach permits the understanding of the policy's functioning, the sequence and dynamics of each phase, from agenda-setting, decision-making, formulation, implementation and finally to evaluation (Jann & Wegrich, 2007). Even though this literature does not address policy failure explicitly, it recognizes difficulties and errors related to each phase of the cycle (Howlett et al., 2009, 2015).

Consider the following: In the agenda-setting stage, governments can fail to identify the main issues to address or select irrelevant or even unattainable goals. This approach conceives failure as the interruption of a process and tries to understand which factors impede the access to the agenda, what the real intentions of the actors are, or why some topic lacks the proper attention (Bachrach & Baratz, 1963; Cobb & Elder, 1971; Kingdon, 2011). Likewise, at the decision-making stage, policymakers may create a policy failure due to the lack of good information, a failure to anticipate risks, or biases favoring particular decision alternatives (Howlett, 2007). Implementation is concerned with the consequences and effects of a policy after formulation; with different focus and emphasis, implementation research has revealed the important barriers for a successful implementation (Winter, 2012). At the evaluation stage of the policy cycle, policy failure may happen because of ignorance caused by deficiencies in the monitoring or feedback process, or because governments failed to learn the appropriate lessons from past experiences (Howlett et al., 2009). However, and as will be explained later, the contribution of implementation and evaluation literature go far beyond their traditional role in the policy cycle.
Incrementalism

A different approach to error—and, consequently, failure—comes from the incremental or "Lindblomian" tradition. By reacting to the dominant rationalistic perspective in policy sciences, Charles Lindblom (1959) offered the method of successive limited comparisons, known as "muddling through," as the way that policy-making works in reality. The complexity of the policymaking process, the conflict of values, the chain of decisions, and limited information make it impossible to achieve a rational-comprehensive policy process; hence, realpolitik uses small steps and trial-and-error as the only route. From this perspective, an error is inevitable and constitutive of the policy process. Consequently, failure to achieve initial policy goals is not an exception but the rule. As Lindblom (1959) pointed out, "Making policy is at best a very rough process. Neither social scientists, nor politicians, nor public administrators yet know enough about the social world to avoid repeated errors in predicting the consequences of policy moves. A wise policy-maker consequently expects that his policies will achieve only part of what he hopes and at the same time will produce unanticipated consequences he would have preferred to avoid" (p. 86).

Aligned with Lindblom, Deborah Stone (2002) considers that accidents in public policy are more than common because the complexity of reality is such that the expectation of an errorless process is unreasonable: "In such complex interactive systems, it is impossible to anticipate all possible events and side effects, so failure or accident is inevitable. Failure also involves so many components and people that are impossible to attribute blame in any fashion consistent with our cultural norm; the responsibility presupposes control" (p. 215). Similarly, Nair and Howlett (2014) embrace the inevitability of policy failures over time. Policymakers face the continuous challenge of responding to a problem under conditions of
ambiguity or uncertainty. To deal with these difficulties, the authors propose the idea of adaptive policies and adaptive policymaking.

**Implementation Research**

The theoretical development of the implementation research tradition goes beyond the idea of implementation as just a stage in the policy cycle, offering significant contributions to the understanding of failure. From the seminal work of Pressman and Wildavsky (1984) about why expectations are dashed in the complexity of the implementation, this literature explores the mechanisms and dynamics that explain the “deviation” of policy from the initial mandate. Pressman and Wildavsky focused on the complexity of joint action as the key of the implementation problem, noticing the different priorities and interests of the multiplicity of actors involved in the policy implementation such as government agencies, courts, interest groups, private firms, media, among others. Another foundational work in the field is *The implementation Game*, by Eugene Bardach (1977) which focuses on the conflict and the political game between actors during policy implementation. These works initiated a long and still influential literature over the dynamics of policy implementation, that over the years has given rise to three generations of implementation research: top-down, bottom-up and hybrid theories (Pülzl & Treib, 2006; Winter, 2012). The top-down perspective emphasizes the ability of decision makers to generate clear policy goals and control the implementation stage. Bottom-up literature focuses on the role of bureaucrats as the main actors in policy delivery, understanding the implementation as a negotiation processes within networks of implementers. And finally, hybrid theories try to overcome the divide between the previous approaches, incorporating elements of top-down and bottom-up (Pülzl & Treib, 2006).
Beyond the different emphasis, the focus of implementation literature is on what happens when the expected results are not achieved or the policy has an "implementation deficit" necessary to correct (Hupe, 2011; Hupe et al., 2014). According to deLeon and deLeon (2002) the underlying assumption of implementation studies is that “programs usually fail despite the best intentions of the public administrators” (p. 476). Although the idea of failure is present, this literature does not focus directly on policy failure, but on the dynamics, interests, and procedures that impede a proper—or successful—execution of the policy. Some of those impediments are: lack of resources, ambiguity or lack of agreement on policy goals, unclear responsibilities, lack of hierarchical control, among others (Matland, 1995; Ryan, 1995; Pülzl & Treib, 2006).

Similarly, a significant body of work has focused on implementation problems from the perspective of public organizations. This approach calls attention to the complex characteristics of public agencies and the mechanisms and conditions of how they implement the policies (Wilson, 1989; Derthick, 1990). The role of the organization, its routines, values, and other characteristics determine and shape the policy. As Derthick (1990) pointed out, "The difference lies in the fact that organizations of human beings, unlike mechanicals or electrical devices, are thought to be infinitely pliable... are also less predictable and, therefore, require a greater effort to understand" (p. 175). Some difficulties for an adequate implementation in public organizations are the lack of concern about administrative issues, common miscalculation of the capacity of the organizations to drive the policy, an inadequacy of the allocation of the resources, a lack of commitment to goals, and inadequate leadership (Mazmanian & Sabatier, 1983).
Evaluation

In addition to the implementation research contribution, another significant influence on the ideas of failure and success comes from the evaluation research literature. From the assessment point of view, there are several questions to consider when facing a policy: Why do we need to evaluate? Who should evaluate? How should that evaluation be carried out? What criteria do we require for evaluation? What is the focus of the evaluation? These questions are not always easy to answer and contain several tensions regarding the understanding of failure and success.

Evaluating a policy involves benchmarks, definition of criteria, perspectives of those involved, and also the researcher's assessment point of view. Thus, appraisal of policy failure expresses epistemological, political, and technical tensions. As stated by Bovens and ´t Hart (2016): “Evaluation is, after all, both a normative exercise, in that it presumes standards against which performance will be assessed, and a political exercise, in that attaching certain labels to a programme or project can have significant consequences for those involved in and affected by it” (p. 3).

There is abundant contemporary writing on the role of policy evaluation as part of the policy improvement process and learning and the varied techniques for achieving this. Usually, the literature on policy evaluation and improvement contains implicit views on success, taking political goals for granted (McConnell, 2010a). However, policy analysis research and its methods has evolved significantly, reflecting on the epistemological tensions—between rationalistic and argumentative policy evaluation—as well as the diverse criteria used to evaluate policies, and its implications (Bovens et al., 2008; Vedung, 2006). According to Vedung (2006), there are three broader benchmarks for evaluation: The
substance-only merit criteria (achievement of goals, stakeholders concerns, client standards), economic merit criteria (economy, productivity, efficiency), and process merit criteria (legality, equity, representativeness). Likewise, there are also many other specific criteria to assess policy failure (listed in Table N.1).

Table N.1. Criteria to Evaluate Policy Failure

- Lack of effectiveness, not achieving the original goals
- Generate negative side-effects
- Not implemented as intended
- Negative Impact on the target group
- Worsening the problem that wanted to solve
- Not meeting the client expectations
- Failing to contribute in a valued area
- Opposition from the key stakeholders
- No improvement compared to similar jurisdiction
- Lack of efficiency regarding cost-effectiveness
- The costs exceed the benefits
- Lack of innovation to respond
- Do not meet moral or ethical standards
- Fail to achieve equity criteria
- Lack of representativeness or public participation

Source: Own elaboration based on Vedung, 2006; Howlett, 2012; McConnell, 2015

The diversity of approaches expresses existing tensions within the evaluation research realm, and the understanding of success and failure will vary significantly, given the criteria upon which the evaluation relies. When confronted with a policy, there is always a struggle of approaches and urgency to clarify the primary criteria for evaluation. Thus, in the case of a policy failure event, there is more confusion than usual: different standards are mistaken and overlap in a tangle of approaches, resulting in full of contradictions, judgments, and parallel readings (Bovens & ’t Hart, 1995).
Current approaches tend to emphasize the political role of policy evaluation, albeit with a technical component. As Howlett, Ramesh, and Perl (2009) claim, “policy evaluation affects considerations and consequences related to assessing blame and taking credit for government activities at all stages of the policy process, all of which can have electoral, administrative, and other consequences for the policy actors” (p. 183). Therefore, evaluation is an inherently political activity. Each step of an evaluative process involves decisions that are also political, for example: Which program or policy should be evaluated? At what moment of time? Under which criteria? For what purposes? Moreover, each policy exists within a complex environment of actors, interest and expectations regarding the outcome of the evaluation (Bovens et al., 2008). Consequently, the role of the evaluator is not apolitical, even less so when it comes to episodes identified as failure or fiasco, because these labels entail a political statement that evaluators have to deal with. So, despite attempts of neutrality and objectivity, it is important to recognize the political nature of evaluation. Thus, Bovens, ‘t Hart and Kuipers (2018) warned: “scholars should not be naive about the nature of the evaluation game they participate” (p. 319).

Policy assessment, especially regarding policy failures and fiascos, is permanently in normative, methodological, and political struggles. Therefore, rather than continuing in epistemological discussions on evaluation criteria, the challenge for policy evaluators is to maximize rigor while at the same time being politically relevant (Bovens et al., 2008; Bovens & ’t Hart, 1995).

Cases of Policy Failure

Literature addressing the idea of success and failure in public policy expresses a multiplicity of approaches, methodologies, and perspectives, which is very distinctive of
social and political sciences. Not surprisingly, there is a wide range of specific literature examining policy failures—from a human error to global disasters—all of which have their particular assumptions and questions (listed in Table N.2)

**Table N.2. Types of Policy Failures**

<table>
<thead>
<tr>
<th>Category</th>
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<tr>
<td>Human error</td>
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<td>Organizational pathologies</td>
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<tr>
<td>Leadership and group pathologies</td>
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<tr>
<td>Crisis and disasters</td>
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<tr>
<td>Policy fiascos and disasters</td>
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<tr>
<td>Scandals and pathologies</td>
</tr>
<tr>
<td>Risk</td>
</tr>
<tr>
<td>Political system overloads and failure</td>
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<tr>
<td>Plagues, pandemics, and viruses</td>
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<tr>
<td>Corporate failures</td>
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<tr>
<td>Economic crisis</td>
</tr>
<tr>
<td>State failure</td>
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<tr>
<td>Global calamity and catastrophe</td>
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Besides, there is abundant and non-connected literature that deals with specific policy failure cases from different points of view. These studies usually assume that something went wrong, focusing on the causes and the subsequent impact of the failure. Examples of these case studies are: the poll-tax policy in the UK (Smith, 1991; Dunleavy, 1995; Gray, 1996), the Challenger and other space explosions (Vaughan, 1997; Boin, 2008; Starbuck & Farjoun, 2009), the hurricane Katrina disaster (Boin et al., 2008; Birkland, 2009), the failure of the employment policy in the US (Mucciaroni, 1990), the bovine tuberculosis crisis in the UK (Grant, 2009; Dunlop, 2017b), the failure of the National Flood Insurance program in the US
(Strother, 2018), the failure of the transportation reform in Santiago (Olavarría-Gambi, 2013, 2018; Cortázar, 2015), or the bedroom tax implemented in Britain (Gibb, 2015), among many others around the world.

In general, this abundant and varied literature arises from an interest in the unique characteristics of each case and does not seek to link to the broader causes that led to failure or to build models of analysis (FitzGerald et al., 2019). However, even though individual cases are indeed unique, this research has gradually contributed to accumulating knowledge, providing keys and distinctions to understand policy failures better.

Nevertheless, there are meaningful efforts to understand the policy failure phenomenon directly through different analytical frameworks. The next section presents some of the most important frameworks and models to disentangle the causes, characteristics, and consequences of policy failure.

### 2.2. Frameworks of policy failure

This section identifies and describes significant contributions addressing explicitly policy failure: early works on policy failure, determinants of program success and failure, the causes of policy disasters, social construction of policy fiascos, policy failure and success in public governance, strands of policy failure, sources of failures, pathologies of policy failure, and policy failure and governance system. While some of these works attempt to unravel the causes and characteristics of policy failure, others are unambiguous efforts to build theory through analytical frameworks. All of this work brings concepts and perspectives about policy failure, and inform a more in-depth analysis of the policy failure phenomenon. These frameworks and their main characteristics are presented below.
Early Works on Policy Success and Failure

Although Herbert Simon (1972), Harold Lasswell (1971), and other authors in the 1970s made contributions about the nature of the error, bounded rationality, or appraisal in policy matters, policy scientists did not address policy failure directly until later. In their work, *The Logic of Policy and Successful Policies* Donna Kerr (1976) discusses the characteristics and conditions for a successful policy, and by doing that, also explains the three ways in which policies can fail, becoming one of the earliest works using the term “failure.” From here, the first cause of failure occurs when the policy cannot be carried out, or *implementation failure*; the second occurs when the policy does not fulfill the intended purposes, called *instrumental failure*; the third way failure happens is when a policy cannot be justified to the public in terms of the norms that they promote, which is a normative failure. Thus, this early work already confronted the difficulty of policy failure phenomena by proposing three separate dimensions of analysis.

Later, Helen Ingram and Dean Mann (1980) directly addressed policy failure in their book *Why Policies Succeed or Fail*. The authors claim that simple judgments about a policy failure are often incorrect, miss several elements, and need a more in-depth understanding beyond linear or simplistic explanations. Even after the policy is initiated, there are conflicting points of view depending on values, expectations, and beneficiaries of the policy. The approach recognizes how hard it is to define and measure success and failure; as Ingram and Mann (1980) claim: "Economists and policy analysts have tended to measure policy success by accomplishment of expressed objectives. Literature demonstrates that criteria for determining policy success can neither be so straightforward nor simple. There may be purposes and functions served for the political system by policies that are not indicated in
stated objectives. Further, policies may fail for reasons including those relating to political systems, beyond the scope which individual policies can affect” (p. 31).

While acknowledging that policies and politics are intricately linked, this initial approach to policy failure proposed the fundamental distinction of political and program-related causes of failure. Ingram and Mann (1980) identified causes of policy failure as: high expectations placed on government that are not always achievable, lack of clarity of policy goals, inadequate theory of causation and policy tools, complexity of the implementation process, disparity between the latent functions of the political system and the manifest policy purpose, challenges and obstacles of policy institutions, and the difficulties to attain presidential goals under existing institutional arrangements.

**Determinants of Program Success and Failure**

In the *Determinants of Program Success and Failure*, Harold Wolman (1981) presents a comprehensive framework to understand program performance. For Wolman, it is not enough to describe how or to what degree policies are successful or fail; in order to move forward, it is necessary to answer the question of *why* public programs fail or are successful. While valuing the contributions of implementation studies—in vogue at the time—he proposes a more complete approach, and argues, "implementation studies, at least as presently conceived, can at best present only a partial explanation" (p. 434). Program failure or success may result from defects or virtues in the policy formulation and design or planning process as well as the implementation.

The framework is divided into two parts, the formulation process and the carrying out process; each contains components that can affect the success and failure of a program. The key components of the formulation are: problem conceptualization, theory evaluation
selection, specification of objectives, program design, and program structure. Likewise, the components of the implementation process are: resources’ adequacy, management and control structure, bureaucratic rules and regulations, political effectiveness, and feedback and evaluation. This is an explicit effort to build a framework of analysis for researchers and decision makers. Determinants are the basis for developing new research on the elements affecting success or failure, and at the same time, a framework for action for policymakers and implementers. Wolman’s idea is that determinants could function as a sort of "check list" of all those factors that could influence a policy’s performance.

The Causes of Policy Disasters

Another contribution to understanding policy failure emerged from the detailed analysis of eight cases of large-scale policy mistakes—called policy disasters—occurring from 1982 to 1995 in Britain. Embracing a critical opinion of the New Public Management (NPM) adopted by the UK government, Patrick Dunleavy (1995) defined policy disasters as: "generally constructed to mean significant and substantially costly failures of commission or omission by government" (p. 52).

With the aim of understanding policy disasters and specifically why the United Kingdom was prone to large-scale and avoidable policy mistakes, the analysis identified five main factors in the generation of policy disasters: scale aggregation, overly speedy legislation, hyper-activism, the arrogance of the Whitehall and ineffective core executive, and lack of checks and balances (Dunleavy, 1995). The first cause is called "scale aggregation" of widespread and highly ambitious policies under the centralist and statist character of the British government. The second is the "overly speedy legislation" as a characteristic of the policymaking process due to the majority in Parliament. The third cause
is called "hyper-activism" of policymakers, which occurs when politicians wanted to gain points with the media and public opinion by generating new public initiatives, which is usually accompanied by a divergence between initiation and implementation. The fourth cause of disasters is denoted as "the arrogance of the Whitehall" referring to some characteristics of the government’s high executives who are self-confident but without the proper background or experience. Finally, the last cause of disaster is the "ineffective core executive and lack of checks and balances," which, combined with the other elements, leads systematically to an unbalanced decision-making process (Dunleavy, 1995).

Dunleavy's work did not pretend to build a framework of analysis for policy disasters, but called attention to the necessity of significant institutional changes. Nonetheless, this study contributed to a broader policy failure debate, widening the perspective on causes of failure beyond the particular program or political scope, distinguishing management and institutional arrangements, as well as other structural factors. Dunleavy’s findings were highly criticized by his contemporaries because of his bold assertion of Britain’s proclivity to disasters, but also because of his loose definition of “disaster.” According to Gray (1996), a better definition might contain a set of elements related to goals, perception, avoidability, and consequences, among others (detailed below in Table N.3).
Through his harsh criticism to Dunleavy’s conclusions, Gray (1996) offers a different definition, “to be a ‘disaster,' a policy must fail against all possible objectives, must be perceived as qualitative failure by all observers, and must fall far short of what is realistically achievable from even the most pessimistic and limited viewpoint. Additionally, full disasters may often have consequences which clearly rebound far outside the immediate areas in which they were intended to have effect" (p. 77).

The academic debate between Dunleavy and Gray about what constitutes a policy disaster reveals the complexity of the topic and how important it is to consider several dimensions of analysis. It is worth noting that reaching an agreed-upon definition of policy failure has been a persistent concern in the literature.
The Social Construction of Policy Fiascos

Bovens and ‘t Hart (1996) contribute to the literature, in what has become one of the most influential works in policy failure, with the book *Understanding Policy Fiascos*, in which they rigorously analyzed 26 cases of policy failure in different countries with the explicit purpose to develop a framework of analysis. By addressing the issue from a social constructionist standpoint, this work highlights the biases by which failure and fiascos are being interpreted and judged, which are deeply rooted in implicit, epistemological, and normative assumptions. As Bovens and ‘t Hart (1996) point out, “the alleged ubiquity of failure is as much a product of social expectations and political ideology as it is due to substantive failures of public service delivery” (p. 146). Consequently, the authors defined policy fiascos as: “A negative event that is perceived by a socially and politically significant group of people in the community to be at least partially caused by avoidable and blameworthy failures of public policymakers” (p. 15). In order to tackle the complexity of policy failures, the authors proposed a framework of four layers of meaning to unravel the process by which a failure or fiasco is socially constructed (see Diagram N.1 below).
Diagram N.1. Layers of Constructed Meanings for Policy Fiasco

Source: Own elaboration, based on Bovens & ’t Hart, 1996.

The first layer, severity of the damage, is the assessment of negative events, i.e. the perception of damage or significant adverse effects beyond what society tolerates as normal—psychological, physical, political, or symbolic—and the influence of those judgments over the perception of failure. The second layer of government intervention is the identification of agents or institutions involved in the policy fiasco because the damage entails human intervention, particularly governmental decisions, actions, or omissions. The third layer of avoidability focuses on the behavior of policymakers and institutions, under the consideration of adverse events constituting something avoidable, either by decisions, acts, or omissions. Finally, the fourth layer of constructed meanings, allocation of blame, addresses the political dimension of policymaking, looking at the allocation of responsibility (Bovens &
‘t Hart, 1996). Thus, each layer is a complex process of construction of meanings that can lead to a unique perception or classification of policy failures, from minor to major ones, or even fiascos.

Continuing to explore the nature and characteristics of policy failure, different authors have applied this four-layers framework (Richardson, 2007; Kearns & Lawson, 2009; Oppermann & Spencer, 2016b). For instance, Kearns and Lawson (2009) explored the case of housing stock transfer in Glasgow in 2003, which involved transferring more than 83,000 dwellings from the city council to community ownership. Even though the policy was heavily labeled as a failure, after detailed analysis of the construction of failure, the authors concluded the policy wasn't a fiasco after all, but a performance defect—because there was not significant creation of social damage beyond the policy itself.

In a similar way, Richardson (2007) uses the four layers of meaning to analyze seven cases in the British educational system, classifying failures as “policy controversies,” “partial failure,” “fail of programs,” with limited political importance, or “significant crisis of governance,” which is a policy fiasco. Analogous to the Glasgow case, this analysis found three of the four layers of meaning, but there was no evidence of sufficient political damage to decrease the legitimacy of the government (which doesn't imply that “smaller” failures couldn’t generate adverse consequences and substantial institutional harm).

**Policy Failure and Success in Public Governance**

Bovens, ‘t Hart, and Peters (2001) go further regarding the conception of policy success and failure, using an analytical framework to explain the factors that promote success and failure in public governance. In line with previous works mentioned, the authors recognize the multiplicity of interpretations and frames in assessing the failure or success,
which depend on temporal, spatial, cultural, and political factors. Thus, based on a rigorous empirical work and a controlled research design, they examine four policy sectors (the steel industry, health sector, banking, and HIV/blood policy) in six European countries (Sweden, Holland, Germany, Spain, United Kingdom, and France).

The inquiry of the 24 cases distinguishes the programmatic and the political dimension of policy performance, using specific evaluation criteria for each governance challenge. In line with the previous literature, programmatic evaluation focuses on efficiency and effectiveness of policy-making as social problem-solving (Lasswell, 1971; Lindblom & Cohen, 1979); and political assessment involves a complicated process of judgments of politicians and policies, through the use of discourses, symbols, political ideology, emotions, and power relationships in the political arena (Bovens, ’t Hart, Peters, et al., 2001). Diagram N.2 shows the integrated framework for each policy sector, placing the countries according to their programmatic and political success and failure.
The framework examines to what extent program and political judgments coincide or diverge. It explores the discrepancies in the policy style and the way each country manages political and programmatic challenges. For example, the case of the HIV/blood policy in Europe shows the crisis was handled according to the policy style of each country. While Sweden and the Netherlands managed the programmatic and political crisis in an inclusive and actively consensual way, Spain and France were less responsible handling the challenges and even sometimes hostile with the groups involved (Albæk, 2001 pp.453-657). The authors conclude that even in hierarchical and centralized political systems, collaborative and consensual arrangements are capable of averting political problems and collaborating to achieve programmatic success (Bovens, ’t Hart, Peters, et al., 2001).
Strands of Policy Failure: Program, Politics, and Process

In response to the need to advance to a better conceptualization of policy failure and overcome methodological limitations in the field, Allan McConnell and collaborators proposed a new framework of policy failure (Marsh & McConnell, 2010; McConnell, 2010b; Howlett, 2012). Policy failure is more complicated than not reaching goals successfully, but there is also more to consider than the social construction that mistakenly leads to the assertion that failure is "in the eye of the beholder." Thus, the framework is an effort to capture nuances, and overcome the epistemological tensions between the objective and subjective dimension of success and failure (Marsh & McConnell, 2010; McConnell, 2010b, 2010a).

Arguing that the program and political distinctions of analysis do not promote a better understanding of policy failure and lead to a conceptual confusion, the framework proposes “process” as the third dimension to elucidate policy failure. The process dimension is related to issues of the policy process—agenda setting, formulation stage, decision-making, implementation, and evaluation—in other words, those elements that aid or impede the development of a policy idea to successful completion (McConnell, 2010a). While policy studies have focused on program failure, the literature of public administration, public management, and organizational studies have been meeting on process-related elements that lead to policy failures, such as institutional design, leadership, organizational dynamics, and other nuances beyond program attributes or outcomes. This new framework takes into consideration that legacy (McConnell, 2010a, 2010a; Howlett, 2012).

The three strands of policy are inextricably linked, but the purpose of the framework is to provide tools to capture the diversity of outcomes and explain why a policy fails in some
dimension but not in others, or why some policies are considered severe failures and others, under similar circumstances are not. Success and failures are not the only options to assess policy, but there are "grey areas" in-between these two poles, leading to a spectrum of intermediate categories between success and failure (McConnell, 2010a, 2011). Diagram N.3 below presents the framework.

Diagram N.3. Strands of Policy Success-Failure
Program Politics and Process

The “strands” framework presents some combinations of success/failure and the type of evidence needed to assess each one of the points on the spectrum. Just regarding policy failure, there are three categories: tolerable failure, conflicted failure, and outright failure (McConnell, 2010b; 2015). A detailed definition is below in Table N.4.

Source: Own elaboration based on Marsh and McConnell (2010), McConnel (2010A; 2010B)
This framework has triggered an intense academic debate in recent years, including the publication of the special issue about policy failure in the *Journal of Public Policy and Administration*. In one of those contributions, Newman and Head (2015) proposed not three but four categories of policy failure: program, process, political/electoral, and distributional. In addition to the program and process strands, the authors argue that the political dimension of failure can connote both resource distributions between competitors as well as political partisanship activities, and the failure policy framework should address them separately. Thus, the “political/electoral” strand includes political parties, legislature, government and organized oppositions, and “distributional” dimension refers to the competition for resources by different groups.

As Newman and Head (2015) pointed out, "the main weakness of the existing literature is that it does not formally recognize that failures and successes in the different categories can

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Table N.4. Categories of Failure According to Three Streams of Analysis

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Tolerable Failure (=Resilient Success)</strong></td>
<td>Failure is tolerable when it does not fundamentally impede the attainment of goals that proponents set out to achieve, and opposition is small, and/or criticism is virtually non-existent. In essence, tolerable failures are marginal features—a politically realistic ‘second best’—of dominant and resilient successful outcomes.</td>
</tr>
<tr>
<td><strong>Conflicted Failure (=Conflicted Success)</strong></td>
<td>Failures to achieve goals are fairly evenly matched with attainment of goals, with strong criticism and strong defense in roughly equal measure. In essence, conflicted failures are dogged by periodic controversy that is never quite enough to act as a fatal blow to the policy, but insufficient to seriously damage its defenders.</td>
</tr>
<tr>
<td><strong>Outright Failure (=Marginal Success)</strong></td>
<td>A policy fails, even if it successful in some minimal respect if it does not fundamentally achieve the goals that proponents set out to achieve, and opposition is great, and/or support is virtually non-existent. In essence, failures outweigh success, and the policy is a political liability.</td>
</tr>
</tbody>
</table>

Source: McConnell, 2015, p. 237
exist simultaneously” (p. 350). Thus, the strands frameworks acknowledge that there are conflicting interpretations of policy failure. The reality is not always classifiable and to fail in one dimension does not imply failure in another dimension or overall (McConnell, 2015; Newman & Head, 2015).

Sources of Policy Failure

There are two very recent works trying to identify the sources and characteristics of policy failure. Peter H. Schuck (2014), in Why Government Fails So Often, and How Can It Do Better, analyzes governmental failures in the US, and Antony King and Ivor Crewe (2013) with The Blunders of Our Governments analyze policy failures of the British government. These works are part of a renewed interest in policy failures, and accordingly, they have some common features. Both are concerned with the recurrence of policy failure, are focused on policies within a particular country, apply an interdisciplinary perspective, rely on case studies to identify the sources and characteristics of failures, and neither attempt to articulate policy failure theory.

Schuck (2014) addresses government failure by recognizing the influence of interpretations and judgments over policy failure, but rejects the idea that failure is in the eye of the beholder; as he claims, “good policy assessment rest upon a number of well-established, relatively uncontroversial criteria that are certified in methodology and routinely used in government practice. Although the application of these criteria to particular policies might be contested, it turns out that the results of such assessments are also remarkably consistent—and consistently negative” (pp. 62-63). Therefore, the author examines current policies at the federal level, from a “substantive effectiveness” approach, including three normative features: efficiency, equity, and manageability. The analysis identifies the sources
of governmental failure in the US (detailed in Table N.5), considering them as “endemic” characteristics of policymaking.

**Table N.5. Sources of Policy Failure**

<table>
<thead>
<tr>
<th>Source of Failure</th>
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<tr>
<td><strong>Incentives</strong>: pervers and unwanted incentives in policies (for example: moral hazard).</td>
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<tr>
<td><strong>Irrationality</strong>: lack of rational analysis, such as cost benefit and cost-effectiveness.</td>
</tr>
<tr>
<td><strong>Information</strong>: costly and improperness of information for decision-making.</td>
</tr>
<tr>
<td><strong>Lack of credibility of the government</strong>: generates uncertainty, and reduces collaboration between public and private sector.</td>
</tr>
<tr>
<td><strong>Rigidity</strong>: inability to adapt and change a running policy.</td>
</tr>
<tr>
<td><strong>The power of markets</strong>: obstacles to policy effectiveness and distortion of government policies.</td>
</tr>
<tr>
<td><strong>Implementation</strong>: lack of analysis leading to preventable implementation failures.</td>
</tr>
<tr>
<td><strong>Limits to law and legislation</strong>: due to their ambiguity, tensions between simple/complex or capacity to shape the policy.</td>
</tr>
<tr>
<td><strong>Bureaucracy</strong>: the “decline” of the public force and the independent effects of bureaucracy over policies.</td>
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</tbody>
</table>

Source: Schuck, 2014

Resembling Dunleavy’s analysis of disasters in the UK 20 years ago, King and Crewe (2013) are concerned about policy failure and why the British government is blunder-prone. Based on case analysis of what they call “horror stories,” like the devastating mis-selling of personal pensions in the late ‘80s, or the swiped ID cards policy in 2010, their definition of “blunder” refers to the degrees and levels of policy failure, and also delves into the policy repercussions they entail. Policy blunders is: ”an episode in which a government adopts a specific course of action in order to achieve one or more objectives and, as result largely or wholly of its own mistakes either fails completely to achieve these objectives, it does achieve some or all of them but at a totally disproportionate cost, or else does achieve some or all of them but contrives at the same time to cause a significant amount of “collateral damage” in
the form of unintended and undesired consequences” (King & Crewe, 2013, p. 4).

Accordingly, analysis of policy blunders distinguishes between human errors (behavioral) or systemic failures (structural). Like Schuck’s work, the authors identify the key features of blunders at each level of analysis (listed in Table N.6).

Table N.6. Human Error and System Failure

<table>
<thead>
<tr>
<th>Human error:</th>
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<tbody>
<tr>
<td>1) Cultural disconnection between policymakers and recipients of the policy.</td>
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<tr>
<td>2) Groupthink and the absence of the ‘devil’s advocate’.</td>
</tr>
<tr>
<td>3) Dominating prejudices or ideological perspectives and insufficient</td>
</tr>
<tr>
<td>pragmatism.</td>
</tr>
<tr>
<td>4) Operational disconnection between design/strategy and operation/implementation.</td>
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<tr>
<td>5) ‘Panic, symbols and spin’, or the power of populist media over policymaking.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>System Failures:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Insufficiency of the central government to initiate, implement or monitor a policy.</td>
</tr>
<tr>
<td>2) High ministerial movement and tendency toward short-term agenda.</td>
</tr>
<tr>
<td>3) Tendency of ministers toward hyper activism.</td>
</tr>
<tr>
<td>4) Lack of accountability and responsibility.</td>
</tr>
<tr>
<td>5) Lack of democratic and parliamentary accountability.</td>
</tr>
<tr>
<td>6) Asymmetries of expertise between policymakers and their consultants.</td>
</tr>
<tr>
<td>7) Lack of deliberative policymaking.</td>
</tr>
</tbody>
</table>

Source: King & Crewe, 2013

Undoubtedly, both investigations offer distinctions that contribute to the discussion on policy failure. The thorough analysis strives to correct, improve, and ultimately get out of this “failure path” that Britain—with the blunders—and the United States—with federal programs—are sunk in. However, beyond the critical features identified and recommendations for each country, the analyses do not offer mechanisms to analyze and prevent future mistakes.
Individual, institutional, and Societal Pathologies of Policy Failure

Hindmoor and McConnell (2015) offer an alternative framework to explore why policy failure happened, asking if it could have been avoided or not. By understanding the policy failure’s nature as complex, manifold, and definitively non-linear, the authors claim "failure is the product of multiple, individual, institutional, and societal factors that coalesce in pathological ways" (p. 66). Through the in-depth exploration of the great financial crisis in the UK in 2008, and under the rubric of individual, institutional, and paradigmatic pathologies, the framework aims to move beyond blame games and dominant explanations of policy failures, like "greedy bankers," "lax regulators," or destructive tendencies of "market capitalism" toward a more comprehensive perspective of policy failure.

At the individual pathology level, the focus is on individual fallibility and human error in policymaking, usually centered on persons holding power positions. The pathology could lead to decision makers misperceiving the signals of a problem, exercising cognitive biases, misjudging, overconfident about the policy, or even blind to failure (Hindmoor & McConnell, 2013; 2015).

The institutional pathology level of analysis is centered on public, private, and non-governmental institutions. Examples of possible pathologies are: the institution is unable to deal with potential threats; the norms and culture of the institution do not have room for “bad news;” an excessive focus on institutional priorities (Hindmoor & McConnell, 2015).

Finally, the paradigmatic pathology alludes to loftier models and principles of society, ideas, and ideologies. This pathology explains why some societies may be not open or receptive to several signals or evidence of impending failure, specific assumptions about capacities, or confidence in historical precedents (Hindmoor & McConnell, 2015).
Applying the three-level pathology framework to the UK financial crisis, they concluded that "nobody saw it coming," and the different warning signs of the vulnerability of the financial markets were weak and few. At the individual and institutional level, the key actors failed to identify the weaknesses; meanwhile, at the paradigmatic level, there was blind faith in the efficiency of the financial markets and their "magical" risk-dispersing properties (Hindmoor & McConnell, 2015). Thus, the level of paradigmatic pathologies played a crucial role in this case, supporting the importance of including this dimension in further policy failure research.

Similarly, van der Steen, Scherpenisse, and van Twist (2015) propose a framework with three connected levels: policy failure, governmental failure, and governance failure. To overcome a simplified understanding of policy failure, it is necessary to advocate for a more systemic and interactive perspective of the intricate systems involved in a policy failure. This approach "considers outcomes the effect of interrelated interactions between different actors and factors of the system" (p. 7). In the case of failure in the Dutch education policy, the analysis emphasizes the exploration of the feedback mechanisms, the interactions within the system and particularly the study of the causal loops, self-balanced loops that draw toward status quo, and self-reinforcing loops where minor interventions can flip the balance of the system. Thus, this framework reinforces the necessity of multi-level analysis to understand policy failure, and emphasizes the role of the interactions and dynamics between levels, something not explored enough until now.

Policy Failure and Governance

Most of the analysis of policy failure has been focused on the policy itself, not considering the political or socio-economic environment surrounding the creation and
implementation of the policy. While some multilevel approaches lean in that direction, such as the previous one, recent literature has also concentrated on systemic determinants of policy failure.

Along these lines, Peters (2015) offers a compelling framework for types of failure to understand the extent by which policy failure is a function or a symptom of the governance system, distinguishing between state failure, two types of governance, and policy failure. The first type, state failure, is a dramatic form of failure in which the state is incapable of providing even basic services; it is most commonly the product of extreme poverty or ethnic conflict and may not be amenable to solution through policies. The governance failure I type encompasses the incapacity to provide direction to the society and the economy; numerous policies can function well, but the system is incapable of addressing fundamental issues, usually due to political parties and their leaders. Governance failure II alludes to the incapacity to initiate more comprehensive action across policy domains or to cope with long-term problems, such as focusing on specific policies often tied to social or economic interests. Failures of this type are the result of failure within the bureaucracy to coordinate and cooperate. Finally, policy failure refers to the ineffectiveness of solving a problem through policy tools. It is the easiest form of failure to solve because it is not linked to the organic structure of the state, and it may occur independently of the other dimensions of failure. As stated by Peters, “Policy change is not easy, and designing the right policy is also not easy, but it does not involve the large-scale political and even social change that may be required to address state failure or governance failure” (p. 264).

This model offers interesting contributions. First, policy failure is not directly correlated to governance failure, i.e. a failed regime not necessarily generate failed policies,
and a successful system not necessarily generates successful policies. The implications of these scenarios are very different for the improvement of policies. Another central contribution of the framework is to stress the limitations of focusing just on the policy level, and not the roots of failure related to the governance system and its limitations. As Peters (2015) points out, “the best designers will be incapable of producing effective policies if the fundamental factors within their governance arrangements are not conducive to success” (p. 272). Thus, the idea is to face policy failure in a broader context, exploring the links between systemic conditions and policy failure. Otherwise, policymaking and the analysis of failure are purblind.

2.3. Common Characteristics of Policy Failure

Policy failure studies are a growing but diverse field of research, and the inherent complexity of policy failures, is also in the multiplicity of perspectives and emphases on the phenomenon. Thus, the literature addressing policy failure—directly or indirectly—have different foci and assumptions. While some research streams are concerned with defining and characterizing policy failure, others address the causes, consequences, as well as perceptions of failure. Nevertheless, there are common elements in the policy failure literature, distinctions that both case studies and models observe and deepen, and this section presents the most important ones: the perceived damage, intentionality, avoidability, government responsibility, blame avoidance dynamics, the paradox of time, visibility, and the role of the context.
The Damage

One of the characteristic elements of policy failure is the concern about the harm caused by the policy. Most of the studies dealing with policy failure refer in one way or another to the idea of damage. For example, Linder and Peters pointed out: “a program may or may not achieve its goals, but creates so many negative side effects” (1987, p. 3); likewise, Bovens and ‘t Hart state that policy fiascoes “inflict cumulative damage” (1995, p. 71); and King and Crewe refer to “collateral damage” (2013, p. 4). Under different approaches and names, this damage component considers distinctions about the extent, intensity, duration, and severity. Therefore, policy failure goes beyond not accomplishing the goals, because it always implies some kind or level of damage.

The extent represents the harmful effects of the policy failure beyond the programmatic dimension to address other adverse consequences, such as economic, symbolic, political, and social (Bovens & ’t Hart, 1996). Extent also refers to the “loss of control,” and how the failure generates “waves of damage.” Similarly, the idea of “scale aggregation” developed by Dunleavy (1995) captures how damage exceeds the scope of the policy event itself, extending its consequences beyond expectations and manageable. Thus, the extent of a policy failure can be small with a limited scope, confined to a policy event, or large, going far beyond what was expected, and affecting an entire policy regime or system-wide (Bovens & ’t Hart, 2016; Howlett et al., 2015).

From social construction literature emerges the idea of the intensity of a policy failure as an expression of the damage caused. Intensity is linked to the level of agreement within the community on the assessment of the failure. Thus, it is not enough that some policymakers or researchers judge the damage caused as severe or costly but it required the
consensus among different groups and stakeholders that indeed the outcomes of the failure are harsh and grave (Bovens & ’t Hart, 1996; Howlett et al., 2015). Therefore, the level of agreement about the extent and degree of the policy failure determines the intensity, ranging from low-intensity events, minor or partial failure, or high-intensity failures usually called fiascos. Similarly, the duration of the failure is considered when assessing the damage. While some policy failures start gradually, but then have long-lasting and severe consequences, other failures are short and sharp and considered as a sole "event" (Bovens & ’t Hart, 1996; Howlett et al., 2015).

From this literature, the way the policy failure is framed by stakeholders and public opinion determines the perceived severity of the damage and the degree of politicization. One crucial feature to determine severity is the appraisal of the violation of core societal values—e.g. democracy, justice, and national security. If there is no threat to core values, the event can be de-politicized and probably will be easier to overcome. If not, the situation may result in a major crisis. After the severity is constructed, the distinction of the degree and scope of the damage is made; this denotes whether the policy failure was a stand-alone error in a system that usually performs well, or if the failure is a symptom of a much larger regime flaw (focusing on underlying causes such as organizational routines or ethics), and consequently carries a severe connotation (Baldwin et al., 2000; Brändström & Kuipers, 2003).

The damage of policy failures also lies in the significant economic costs. The case studies in this literature allude to the enormous economic burden on governments and citizens (Dunleavy, 1995; Bovens, ’t Hart, Peters, et al., 2001; Grant, 2009; Olavarria-Gambi, 2018). These costs point not only to the waste of resources due to the failure to achieve policy objectives, but also to all the resources that governments allocate to correct policy
errors, which sometimes even end up worsening initial situations, in what has been called "fatal remedies" (Peters, 2015). However, excessive costs or the waste of resources are important elements for the judgment of damage, but not the only ones.

Along with economic and social damages perceived, policy failures generate serious consequences for authoritative actors. Negative policy evaluation can undermine the credibility of the leader and the ability to command support, affects coalition behavior and parliamentary support for the government, also distresses political party loyalties and party member/activist behavior towards leaders and others, and finally affects voter behavior and support for the party/government/regime (Howlett, 2012, pp. 548–549). Policy failures usually lead to the perception of significant loss of social trust, generating an adverse climate, and damaging authorities' ability to exercise effective governance. To this point: “A trust deficit should concern anyone interested in good governance, even if that deficit is based on mere perceptions of trustworthiness” (Forbes, 2004, p. 343).

Thus, the idea of damage is extended beyond policy goals achievement, affecting other political dimensions and undermining the democratic stability. As McConnell points out: “Policy failures can also cause electoral and reputational damage to governments, and even lead to the downfall of public officials, politicians, governments and regimes” (2014, p. 2).

**Intentionality**

Another common element in the policy failure literature is intentionality. The policy's appraisal depends on whether public opinion and policymakers deem harm as intentional or unintentional. Usually, the initial reactions to a policy failure are to uncover the policymakers’ real intentions, especially assessing who could benefit and who might be
harmed (Howlett, 2012). Thus, the severity and consequences are very different if the policy is considered an unexpected accident or intentional action. Whereas an unintentional failure is more of a misfortune occurred despite the noble intentions of the policymakers.

Stone (2002) offers some helpful distinctions about intended or unintended consequences and how generates different causal stories about policy failure. Unintended consequences of a failure are due to accidental causes (natural disaster, bad luck) or inadvertent cause (unanticipated harmful side effects, avoidable ignorance, carelessness). In contrast, the intended consequences of failure can be provoked by a mechanical cause (people who act like automatons, rigid bureaucratic routines, machines performing as designed but causing harm), or intentional cause (oppression, conspiracies, "bad apples," harmful but ignored side effects) (Stone, 2002, pp. 208-214). Regarding this latter point, there are several intentional causes of policy failure; as Howlett (2015) claims, governments can fail due to “malfeasance, fraud, criminal activity, ideological intentions, conspiracies and other kinds of self-defeating behavior on the part of government officials and decision makers” (p. 214). Therefore, it is important to distinguish between those failures that come from evil or malevolence, from those that result from goodwill or good intentions but inadvertently turned out bad, and Policy failure literature focuses on the latter (Howlett, 2012).

The reaction to a policy failure may be quite different if the failure is understood to be intentional or non-intentional. This has significant consequence on the whole judgment process of the failure. People tend to be less harsh in their judgment if a failure is considered non-intentional and usually prevents escalation of the conflict. However, if the perception of
intentionality is high, the political consequences tend to be severe and long-lasting (Howlett, 2012).

**Avoidability**

Along with the problem of intentionality, the question of avoidability and foreseeability—the ability to avert or anticipate—is critical when it comes to evaluating and judging a policy failure. The discussion about avoidability is linked to other policy alternatives that hypothetically could lead to a satisfactory result instead of the failure. This idea has been called “neglected-alternative bias,” i.e. the failure is always influenced by the existence of considered better policy choices (Bovens & ’t Hart, 1996; Kearns & Lawson, 2009). Furthermore, the idea of foreseeability and avoidability of the failure is related to how predictable the consequences were, as well as the capacity to control or overcome the errors once detected. Accordingly, the attribution of failure is greater if the event is considered avoidable or foreseeable (Gray, 1996; Richardson, 2007).

Unpredictable or unavoidable events can generate more sympathy for policymakers and therefore perceived as a smaller failure than those that were easily averted (Howlett et al., 2015). For example, in the case of an earthquake and subsequent tsunami that devastated the central coast of Chile in 2010, policymakers received milder judgments than expected despite the enormous magnitude of the damage, the failure of the alert system, and several mistakes in managing the catastrophe (Luna et al., 2010; CIPER, 2012a). The failure, however, wasn't considered avoidable or foreseeable by the public. In spite of a long history of major earthquakes in the country, the cultural understanding of natural events as unpredictable, and the public consideration that the damage had been monumental led to
judgments of avoidability and foreseeability, and caused this leniency (Leyton et al., 2010; CIPER, 2012a).

Nair and Howlett (2017, 2014) have a different perspective regarding the avoidability and prevention of policy failures. This approach understands failure as inevitable. Since decision makers often face incomplete information, this leads to the inability to adequately predict the future, and therefore make bad decisions that can lead to policy mistakes or failures. This difficulty to foresee is called "policy myopia," which they define as: “the difficulty of seeing far enough into the future to discern its general shape and contour in enough detail to be able to properly anticipate and plan in the present” (Nair & Howlett, 2017, p. 104). From this perspective, to overcome policy myopia and avoid policy mistakes, it is crucial to evaluate policy risks and to identify uncertain circumstances.

**Government Responsibility**

One of the widely accepted ideas about policy failure in the literature is the notion that failures may be the government’s responsibility, hence caused (at least partially) by action or omission of the government (Bovens & ‘t Hart, 1996; Gray, 1996; Howlett et al., 2015). “Government” may be represented in various ways, such as individual public officials, federal agencies, regulating organizations, legislative bodies or head of state/government. The literature addresses the notion of “action” and “omission” by reference to organizational and social psychology research: when faced with a conflict, individual behavior varies along the dimension of omission or commission; in other words, either a person confronts and acts against the threat, or they ignore it. However, research has reported a tendency toward “omission bias” in decision-making when facing risk or uncertainty
because people perceive more risk in taking action than inaction (Mellahi & Wilkinson, 2010).

To assign responsibility for policy failures is not an easy task, especially in modern and complex public organizations where the “problem of many hands” diffuses accountability every time more. As said by Thompson (2014), “The failures of governments are usually the result of decisions and non-decisions by many different individuals, many of whose contributions may be minimal and unintended” (p. 9). The author analyzes the cases of the response to terrorist attacks on the World Trade Center in 2001, the Deepwater Horizon oil spill in the same year, and the financial crisis in 2007, firmly concluding a lack of individual responsibility in each of these cases. In order to face this problem it is essential to have a preventive approach and design responsibility at different levels because otherwise, these failures will happen again (Thompson, 2014). Similarly, the analysis of policy failures in four critical areas of public service delivery in the UK concludes that “the ownership of failure is shared” (Wajzer et al., 2016, p. 34). Thus, collective responsibility goes beyond the particular public service in which the failure occurred, incorporating a wider system—such as the central government, local government, regulator.

Another contribution to the idea of government responsibility and policy failures comes from a theory of political change called “selectorate theory.” This theory analyzes how the relations of the sizes of the winning coalition and the selectorate—every person who has some say in choosing the leader—can explain if the leader prioritizes the pursuit of private goods over public or government performance. Bueno de Mesquita, Morrow, Siverson, and Smith (1999) study how those responsible for policy failure stay in politics despite all indications to the contrary. To address the question, they investigate the role of
institutions and their characteristics regarding policy failure and "political survival." By using statistical analysis to test the relationship between the size of the selectorate, the winning coalition, leadership, and failure, the authors conclude that some type of political systems—typical autocracies, small victorious coalitions, and large selectorate—are prone to policy failure. Those political groups are easily influenced by the leader's vision, inducing an endogenous norm of loyalty by the members toward their leaders, even when faced with policy failure. Unlike what is expected in a democracy, those systems are less attentive to failure “because in such systems, policy failure does not represent a major threat to the political survival of the leadership” (p. 160).

Judgment on government responsibility for failures involves different actors, political parties, citizenship, voters, and also the scientific community. Regarding the latter, a widely studied case is the public health hazard BSE (bovine spongiform encephalopathy), better known as "mad cow disease," that led to the death of 80 people and the slaughter of millions of cattle, costing billions of pounds in the UK (Carrington, 2000). The case shows a particular relationship between science and policymaking that finally end up worsening the crisis. Authorities misrepresented the policy goals and the grounds of policy decisions “by acquiring, interpreting and representing scientific information and advice in ways that were unscientific and anti-scientific” (Van Zwanenberg & Millstone, 2003, p. 28). Likewise, this case points out the critical role of public inquiries—in this case conducted by Lord Phillips and lasted two and half years—in order to understand the scientific causes of the disease and determine government responsibilities. The public investigation determined that the outbreak could not have been foreseen and the measures taken by the government were adequate given the information available at the time. However, it assigns responsibility to the government
for mismanagement of the crisis (Klein, 2000; Forbes, 2004). According to Gerodimos, the governmental response to the crisis was inadequate in different realms, “Expert advice; review of this advice by officials; pace of policy-making; communications within departments; coordination; control and delivery of implementation; scrutiny and transparency; honest communication with the public; the adjective that unites them all is ‘inadequate’” (2004, p. 926).

Responsibility for failures usually rests on governmental authorities. Several policy failure studies pay special attention to the role of policymakers at the top of the hierarchy, those small groups wielding significant influence and power, and how their characteristics and ways of thinking contribute to policy failures. This is evinced in what Dunleavy (1995) called the "arrogance of the Whitehall," alluding to a particular “managerialism style” as one of the causes of policy disasters; the “overconfidence” of policymakers, in the case of the great failure of TranSantiago transportation reform (Cortázar, 2015); “leadership traits” that might increase leaders propensity ending up with policy fiasco (Brummer, 2016); the “great leap forward politics" or ambitious decision-making style which led to catastrophic economic consequences in the case of rail privatization (Moran, 2001). Other similar concepts are: the idea of “cognitive bias” and “blindness to failure” as part of an individual pathology of those who hold power (Hindmoor & McConnell, 2015); the “stubbornness,” or the refusal to accept that policy was not working and continuing regardless of the warning signs (King & Crewe, 2013); the “culture of secrecy” of decision makers that aggravated a public health crisis (Gerodimos, 2004); and finally, “overvaluation, overconfidence, insensitivity and wishful thinking” that lead to a lack of preparedness and insufficient collective reaction to hurricane Katrina (Parker et al., 2009). Like all of this, several works refer to characteristics
of managers and decision makers and how these characteristics are linked to policy mistakes or failure.

In this same line, it is worth pointing out the literature of Groupthink, which has focused on understanding the dynamics of public officials and especially high-level decision groups in policymaking. Originally from social psychology and public administration, groupthink is focused on the influential role of the small group, their ideas or ideology over policymaking, generating a distorted view of reality, and excess of optimism leading to reckless policies, failures, and fiascoes. Initially defined by Janis (1982), groupthink is "a mode of thinking that people engage in when they are deeply involved in a cohesive in-group when the members' strivings for unanimity override their motivation to realistically appraise alternative course of action" (p. 259), or in other words, the propensity of decision makers in small groups to make sub-optimal decisions. When groups are under a lot of pressure and they are highly cohesive, they change the way they operate and become a threat to decision-making. Once the groupthink is installed, a series of pathologies or symptoms appear (listed in Table N.7), which leads managers to miscalculate events and thus to defective decision-making—such poor search of alternatives, ignorance of outside information and biases information processing—and finally failure (’t Hart, 1991; Mellahi & Wilkinson, 2010). For Janis (1982), “even individuals who are generally high in self-esteem and low in dependency and submissiveness … are quite capable of being caught up from time to time in the group madness that produces the symptoms of groupthink” (p. 243).
Table N.7. Symptoms of Groupthink

- Illusion of invulnerability
- Belief in inherent morality of the group
- Collective rationalizations
- Stereotypes of out-groups
- Self-censorship
- Illusion of unanimity
- Direct pressure on dissenters
- Self-appointed mind guards

Source: Janis, 1982; ’t Hart, 1990

The groupthink approach does not arise as the only explanation, but there is a tendency to use groupthink dynamics as the leading cause of fiascoes. Later work has suggested that groupthink can be a meaningful but limited explanation for policy failures. Decision groups do fall into the trap of groupthink, risking flaws in the decision-making process, but the scope is limited because a low percentage of policy decisions are the subject of these trends (’t Hart, 1990, p. 281). This literature underscores the importance of groupthink prevention and the improvement of the decision-making process of the government.

**Blame Avoidance**

After a policy failure event occurs, the common reaction of policymakers, media, and public opinion is to seek out the responsible party for the failure: who was powerless to avoid it, who did not see the failure coming, or who, despite warnings, decided to "push the button" that led to disaster. This search is a complex dynamic of arguments and accusations is the focus of blame avoidance behavior literature (BAB), commonly known as the “blame game”
(Hood, 2002; Howlett, 2012; Hinterleitner, 2015). This section presents the main contributions regarding policy failure.

There is an extensive literature in political science and political psychology on blame avoidance as the crucial motivation for politicians (Weaver, 1986; Bovens et al., 1999; Hood, 2002). The central idea is that voters are more sensitive to political losses than gains, leading politicians to look for strategies to avoid the blame at all costs, even if that means not pursuing policy objectives. The “blame game” metaphor represents those who blame and those who avoid blame as “players”—blame makers and blame takers—who are trying to persuade others to side with their position regarding a policy issue, especially when the game takes place in the public eye (Hood, 2011; Hansson, 2018). The nature of the blame game helps explain why policies are so difficult to change, even if they fail; as Weaver (1986) noted, "if policymakers and their constituents perceived cost and benefits symmetrically, they would be willing to change policies quite freely … but cost and benefits are perceived asymmetrically, policymakers fear that new policies will not win them as much support as dismantling the old ones will lose" (p. 394). There is a relationship between the risk that policymakers are willing to take and the blame that they will receive from the voters. The way that politicians handled those variables (risk and blame) led to a combination of games between blamers and blamed (Hood, 2002).

There are different strategies to minimize and avoid liability, some of the most important are: “risk defensive strategy,” “spin your way-out trouble,” and “find a scapegoat.” A defensive risk strategy concentrates actions and statements on good things instead of the failure, but this is not necessarily effective, sometimes intentionally avoiding blame and liability may worsen the political situation (Hood, 2002). The “spin your way out of trouble”
strategy seeks to shape public impression over the policy controversy, and therefore the strategy is to publicly deliver arguments for limiting blame (excuses) or turning blame into credit (justifications) (Hood, 2002, 2007). However, the most common strategy is scapegoating: “Having a scapegoat at hand for ritual sacrifice in the face of public criticism provides senior office-holders with one more option for surviving scandal and demonstrating resolute ‘crisis management’” (Brändström & Kuipers, 2003, p. 299). But scapegoating is only effective when failure events are not perceived as structural or endemic; in extreme cases, this and other strategies are not enough because the whole institution is delegitimized. Hence, when the causes of the failure are related to complex causal chains and the interplay of several actors, the attribution of responsibility is complicated. Usually, the blame is dispersed, and the sanctions avoided. If the failure is defined more narrowly, then the attribution of liability is easier to address (Brändström & Kuipers, 2003). Other strategies to avoid blame are delegation, the redefinition of the issue, to delay the blame game by providing resources to prevent losses, or to deflect the blame by supporting popular alternatives, among others (Weaver, 1986; Hood, 2002).

These mechanisms of blame avoidance are subtle and deeply embedded in the way that organizations operate and members behave (Hood, 2011). When a policy failure happens in an organization, the common ritual is the leader taking responsibility for what happened and suffering few consequences (Thompson, 2014). However, this default is an obstacle to understanding the sources of the failure, which elements are structural defects and which ones are human error, and so how to prevent similar errors in the future.

In the last 15 years the concept of blame avoidance has been applied beyond politicians’ goals and re-election, considering it as widespread behavioral phenomenon in the
political sphere, opening new eyes to better understand blame avoidance dynamics. As stated by Hinterleitner (2015): "Public actors are generally held accountable by different actors in different forums, for different things and in different situations" (p. 6). Thus, recent literature on blame assignment and avoidance observed that the escalation of guilt could lead to behavioral adaptations and change policy practice. In order to avoid blame, officeholders apply policies differently. Consequently, the effect of the blame game goes beyond the scope of the initial policy failure, leading to institutionalize a more politicized policymaking practice, which also affects the legitimacy of the policy and even undermine democracy (Hinterleitner, 2018). Another area of study is the role of expert judgment and information in attributing blame for policy failure, concluding that people tend to ignore information and do not change their original opinion, “rather than acting as a means for cultivating objectivity, expert information appears to only exacerbate individuals’ partisan tendencies” (Lyons & Jaeger, 2014, p. 335). Another dimension recently studied is the role of language in blame assignment. Within the symbolic persuasion realm, Hanson (2018) analyzes different narrative and discursive strategies—the language games—that allow an enhanced understanding of the dynamics of assignment and avoidance of blame. From here, government blame is: “a goal-oriented and often highly mediated discursive struggle over the meaning of (potentially negative) events and (potentially blameworthy) actors, including policies and policymakers who try to retain their legitimacy” (Hansson, 2018, p. 16).

The Paradox of Time

In the classic work Speaking Truth to Power, Aaron Wildavsky (1979) coined the concept "paradox of time" to show how past successes can lead to future failures and the irony of time in policymaking. Things considered achievements at one moment can—a
decade later—suddenly become dilemmas or abject failures. Likewise, the paradox of time can work the other way around. The most studied case is the construction of the Sydney Opera House from 1954 to 1973. Throughout this protracted period of implementation, the project was considered a major fiasco; the construction took ten more years than planned, the costs rose dramatically—more than 10 times, and the whole process was accompanied by criticism and confrontations between the architects, public officials, and stakeholders. Years later, the building became the major tourist attraction and symbol of Australian prowess (Bovens & ’t Hart, 1996; King & Crewe, 2013). Similarly, in the 1960s, as a response to problems of urban overcrowding in the US, the government developed the policy of high-rise apartments (tower blocks) that initially was considered a major success. However, time change that idea and the policy ended up been considered a major failure, even more, as the epitomizing urban squalor associated with poverty, crime, unemployment, and drug abuse (Marsh & McConnell, 2010). Thus, criteria to assess a policy may evolve over time; the environment may change, priorities fluctuate, or the policy can produce unforeseen or unexpected consequences.

Policies are dynamic entities and unfold over time, and the convoluted nature of policy failure and their multiple perceptions is also changing as time passes. Groups are changing their judgment about the effectiveness, adequacy, or other criteria of the policy, and also support and opposition to policy varies depending on the political climate. Different actors often express judgments and advocacy for policy change long before the implementation and impacts of the policy settled. As Smith pointed out, sometimes, "policies may not be given the time to prove themselves before declarations of success or failure are forthcoming" (Smith, 1989, p.13). Therefore, the timeframe to evaluate a policy is
particularly challenging both to policymakers and researchers. As Lasswell said in 1971, “at the same time success must be kept suspect particularly when all seems to be going well (…) because short range success is often the parent of long range failure” (p. 84).

In the face of conflicting outcomes, the chosen period to evaluate a policy is crucial and it is important to distinguish between short, medium, or long-term priorities (McConnell, 2011, p. 66). The role of time should be addressed explicitly in any policy failure analysis; moreover, it should be considered as another dimension of analysis, just as relevant as the strands of process, policy, and politics (Marsh & McConnell, 2010; Newman & Head, 2015).

Depending on the circumstances, a policy failure, a disastrous management of a crisis, or even minor policy mistakes, may be the catalyst for future transformations. For instance, by studying 40 years of health reform in Australia, Kay and Boxall (2015) explored the causal link between policy failure and future policy events. They concluded that time is critical, because failure generates pressure for future improvements, necessitating assessments and understanding of errors that will shape the subsequent policy change, or, quite differently, by deinstitutionalization mechanisms through processes of institutional erosion.

The time factor is critical for learning from failures. However, time doesn’t always contribute to overcoming policy failures or facilitating learning, and sometimes does just the opposite. More often than expected, people witness the same type of failures, in the same sectors, repeating over time and across countries (Howlett et al., 2015). For instance, by studying the evolution of wildfire management in the US, Busenberg (2004) notes that some policy failures persist over time. He defines propagation of policy failures as: “a process in which policy errors persist (with mounting impacts) over long periods of time” (p. 145). He
states that bounded rationality of policymakers and self-reinforcing mechanisms—over issue definition and institutional arrangements—accentuated failure of wildfire management over the decades. Thus, this and other several cases show that, despite the detrimental consequences of failures and opportunities for learning, the persistence of policy failures is a prevalent phenomenon (Howlett et al., 2015).

**Visibility**

The idea of failure is linked to the visibility acquired by the policy, its "publicness" (Howlett et al., 2015). The visibility and salience of policy failure are especially relevant for the literature of social construction (Bovens, ’t Hart, Peters, et al., 2001; Bovens & ’t Hart, 1996). Sometimes policies fail abruptly in reaching their expected goals and waste a substantial amount of public resources, yet public opinion or stakeholders do not perceive it as a failure. Similarly, an entire organization may not achieve the planned goals, recognize this, and not label the results as failure. As Anheier & Moulton (1999) openly admit, failure is “independent of performance, an organization is not truly failing until the public perceives it as such” (p. 280).

The social perception is a complicated process of negotiation of meanings to frame and label some policy event. The so-called "public perception bias" underscores the idea of perception of the failure, requiring the agreement of a great amount of people believing that something went wrong (Hall, 1993; Bovens & ’t Hart, 1996). Likewise, the level of perceived severity is crucial to capture the attention of public officials and the media. If the event is framed as a major crisis that affects the core values of the society or if more actors are likely to get involved, the wider the scope of the controversy will be (Brändström & Kuipers, 2003).
The visibility of a failure event is not just about the extent or scope of the damage generated by the policy, but also the political situation at the time, where different actors may consider it appropriate to label the policy event as a failure. Thus, public attention depends on how opinion leaders and the media frame policy events, so it is always a political act, "a policy failure, like all news development, is a creation of the language used to depict it: its identification is a political act, not a recognition of a fact" (Bovens & ’t Hart, 1996, p. 34).

The framing process by the media involves definitions, interpretations, and attribution of causes and responsibility that finally leads to constructions of failure, which range from technical issues to moral controversies. Hence, the role played by the media is always key in how an event becomes a policy failure. With negative coverage, the media creates a climate that encourages further negative comments from interest parties, and biased assessments are easy to produce because they resonate with the public discourse (Bovens & ’t Hart, 1996; Kearns & Lawson, 2009). Thus, the degree of visibility achieved by a case of policy failure should be carefully analyzed, as stated by Light, “all government organizations fail from time to time, but that some fail much more visibly than others. Visibility, however, is not necessarily an indicator of either impact or importance, nor is it a harbinger of continued risk” (2014, p. 2). Alongside framing the policy failure, journalism and media actually have an active role in promoting accountability in different ways: presenting social problems in terms of causes, solutions, and responsibility; organizing arenas of debate and opinion; and actively interviewing the stakeholders related to the policy failure event (Djerf-Pierre et al., 2013).
The Role of Context

Considering the context to understand policy failures may seem straightforward or even obvious; however, the emphasis on understanding and systematizing the causes and characteristics of policy failures have led the majority of the literature to inadequately consider context’s role in the failure (Gray, 1996; McConnell, 2016). As Peters pointed out, "the causes identified for failure in the policy literature are legion, but the majority of these failures have been connected to characteristics of the policies themselves rather than to the political or socio-economic environment within which those policies are being made" (2015, p. 261). Therefore, policy failure analysis should consider institutional, social, economic, historical, and cultural variables. The context is not something external but constitutive, and often it can become an essential element to understand why some interpretations about a policy failure are formed (McConnell, 2016; Moynihan, 2006).

McConnell (2016) points out that analyses of policy failure cases usually give the impression of having understood the whole story, generating a narrative that links decisions and actors toward failure; however, these cases usually ignore the prior historical context in which the policy was designed and discussed. He states, “we should avoid a fruitless search for a definitive, scientifically rational cause of any particular policy failure, or getting caught in the trap of saying definitively that failure has a single cause, isolated from its context” (p. 11). McConnell recognizes the task of incorporating context is complex and entails methodological challenges, but dares to propose ways to "capture" and operationalize this context. One approach, for example, is to identify how different actors frame the causes of policy failure.
Oppermann and Spencer (2016b) claim that fiascos are not factual episodes but constructions in a political discourse of what they call “failure narrative.” Here, the setting of the story, the negative characterization of the actors, and the causal plotting of the event—the sequence of connected events in time—are keys in the narrative of the fiasco. The setting (similar to a theater’s stage) is understood as the background or location in which the story unfolds, representing a set of norms and values, and in this way, alluding to the context of policy decisions for what is considered appropriate behavior. The setting is not external or neutral but meaningful and even determinant in understanding the nature and characteristics of failure in the narrative.

King and Crewe (2013) also delve into the role of cultural elements as relevant variables of blunders. One interesting distinction is the concept of “cultural disconnection” between policymakers and the real situation that the policy wanted to address. For instance, with the aim to solve the problem of divorced parents not contributing to the wellbeing of their dependent children, and by doing so reduce social security costs, the UK’s Child Support Agency (CSA) in 1993 applied new rules to reduce dependence on state benefits. However, the policy was poorly implemented and operated with inflexible rules that did not consider the existing complex arrangements between divorced parents. These problems led to several controversies, including massive protests of divorced parents against the CSA, rising program costs, and a loss of legitimacy of the government (Dunleavy, 1995; King & Crewe, 2013).

Depending on cultural worldviews and values, people deem different events "failures." Individualists fixate on inappropriate governmental intervention (waste or resources, excessive bureaucracy); for people inclined toward hierarchy, failure relates to
unlawfulness, insubordination, or bureaucratic disruption; egalitarians will concern
themselves about a failure in the protective role of government or growing inequalities
(Bovens & ’t Hart, 1996, pp. 29-31). Likewise, there are important divisions between and
within nations about what is failure, the so called “cultural bias.” Cultural frames and
expectations about the government's actions can lead to what in one country is considered a
success, while in another a failure, which leads to endless debates and comparisons and even
to an “ethnocentrism trap” (Bovens & ’t Hart, 1996). Thus, policy decisions that seem
reasonable and could work in some contexts may not work at all in others; differences in
outcomes may be associated with differences in cultural narratives, history, and values
or organizational failure is culturally loaded” (p. 29).

Present-day literature is increasingly considering the role of context, culture, and
influence of institutions and governance arrangements on policy failures. As discussed in the
previous section, some of the studies emphasize institutional and structural variables that
determine and shape how failures occur and their interpretation. Thus, policy implementation
is embedded in institutions and societal paradigms that usually are unnoticed or disregarded,
but play a significant role in understanding failure and the likelihood of learning from them
(Walsh, 2006; Dunlop & Radaelli, 2018b). Stated by McConnell: "All policies are formed
and decided upon by individuals, but they are produced and enacted in broader institutional
contexts, which in themselves operate in broader societal contexts of governing ideas,
powerful groups, changing technologies, global interdependencies and so on" (2016, p. 9).
2.4. Learning from failure

As other concepts in social science, there are multiple approaches and interpretations regarding the meaning of policy learning, its origin, the trigger of policy change, those who learn and their motivations, and the role that environment plays. Consequently, the literature on this subject is vast and varied (Bennett & Howlett, 1992; Dunlop & Radaelli, 2013; Dunlop, 2017b). This section focuses on the connection between policy failure and policy learning, identifying categories, dimensions, and levels of analysis.

When a policy fails, it is expected this will lead to changes; do not repeat mistakes, made changes, and better handled the situation next time. In other words, it is expected to learn from the failure. From the policymaking perspective, a policy failure will expose decision makers to intense criticism, threaten the dominant coalition, and the prevailing ideas. Therefore, failure expresses the lack of effectiveness of existing policies and gives incentives to new directions to restore legitimacy (Walsh, 2006; McConnell, 2010b). Unfortunately, policy failure is rarely a sufficient explanation for policy change. As Walsh (2006) claimed, “Failure does not always produce change; instead its effects are mediated by the interest of important constituents and alternative policies’ accounts of past failures, and either of these, can block the adoption of a new policy” (p. 499).

Barriers for Learning

There are several countervailing forces in learning from past policy failures. Policy, as socially constructed or even as an institution, reflects the result of past power struggles. Thus, the learning process arising from failure, can be restricted by power (Kay & Boxall, 2015). From a political point of view, governments are reluctant to accept their failures and seek to remain blameless at all costs. Their actions are frequently designed to downplay...
failure and assign blame, denying the existence of failure and protecting the reputation of policymakers and government rather than improving policy outcomes. If they are strong enough, political groups will oppose or block any intent to a change, which exposes the previous failure (Hood, 2002; McConnell, 2010b; Newman & Head, 2015).

From an institutional perspective, there are also challenges in learning from past failures. For instance, the complex interdependence between organizations and actors prevents easy agreement upon the nature of failure and even more regarding the direction and characteristics of change. Additionally, institutional arrangements diffuse authority and make it harder to convince leaders about the necessary transformations. Thus, decision makers can reject a new policy proposal because of a lack of institutional capacity to implement the changes or fear of repeated failure; the government may limit evaluative efforts, from fear of explanations that may arise; or from a desire to maintain organizational stability. Like this, policymakers and organizations face considerable uncertainty about the availability of change and the outcomes of new ideas and alternatives (May, 1992; Walsh, 2006).

From the perspective of organizational psychology and organizational studies, Brown and Starkey (2000) reflect on the complex learning dynamics in organizations. They highlight the five most important defense mechanisms: the denial of the problem and the responsibility of failure; rationalization as an attempt to justify the impulses and reasons considered unacceptable to make them tolerable; idealization of the situation that causes a course of action to be followed; fantasy that represents the unconscious effort to achieve impossible goals or aspirations confirming previous ideas and keeping the course of action; and finally the symbolization that makes an external object or process the representation of an idea, person, or value (Brown & Starkey, 2000; Mellahi et al., 2002). In order to avoid
these negative aspects, individual and organizational reflection is critical. Consequently, “management’s role is to promote mature and adaptive wise thought and action in pursuit of the collective organizational good” (Brown & Starkey, 2000, p. 114).

The magnitude of policy failure affects the probability of policy change. If a failure is perceived as minor or the characteristics of failure are contained, the likelihood of change is low, but if a failure is perceived as major and if it appears that evasion of the crisis appears impossible, there is significant pressure for change. High public expectations after huge disasters often force policymakers to project a desire for change so as to indicate to the public that they recognize the need for transformation after a fiasco (Birkland, 1997; Walsh, 2006).

As Bovens and ‘t Hart (2016) claimed, “big policy failures can be, but all too seldom are, a trigger for big policy learning that reduces the likelihood of their recurrence” (p. 10).

However, no matter how serious the failure is, and how significant political and programmatic is the pressure for change, failure alone does not provide a guide to the correct alternatives. According to Walsh (2006), to truly learn from failures, requires two conditions. First, there must be a clear explanation of the failure, and second there must be a politically viable alternative that will yield improvement. In Walsh’s words: "[the public requires] a convincing explanation of past failure and a new way forward that is acceptable to individuals and groups whose support is important to decision makers. If either of these two conditions is missing, decision makers will allow policy to drift, making only minor and perhaps contradictory changes after failure" (p. 491).

Types of Learning

Therefore, even if the policy failure leads to further improvements, it does not mean learning has occurred or that the changes that have occurred are appropriate. Sometimes there
is a missing intellectual link between policy tools and desired outcomes, and policymakers continue implementing the failing policy or making only minor policy changes that do not address the source of failure (Walsh, 2006). Post-crisis reform studies show that despite transformations, those changes are not as profound as expected. An interesting incident is the Challenger explosion in 1986, a shocking and widely analyzed case that finally led to many procedural and highly technical modifications, which unfortunately disregarded necessary organizational and cultural changes within NASA to avoid future failures (Vaughan, 1997; Boin, 2008).

Along the same lines, O’Donovan (2017) explores the association between policy failure and policy learning. By analyzing three cases of failure as a result of tornados—Kansas 2007, Missouri 2011, and Oklahoma 2013—the author concludes that policy failure leads to policy learning, but not necessarily by addressing the original problem that the failure revealed. Thus, observing the role of past experiences and governmental capacity is critical to promote instrumental and social learning (O’Donovan, 2017). Similarly, Dunlop (2017a, 2017b) shows that “learning is not always a good thing” (2017b, p. 10), and introduces the idea of dysfunctional or degenerative learning. By analyzing the management of bovine tuberculosis (“mad cow disease”), Dunlop concludes that sometimes learning involves “negative lessons” that end up worsening the policy.

As noted, there are varied nuances and perspectives in discussing policy learning after a failure episode. What is the scope of the learning? Who are the agents of learning? What is the nature of the learning? What are the effects of the learning process on future policies? These and other questions have different answers depending on the analytical perspective chosen. For instance, a useful definition of policy learning focuses on a better attempt to
adjust policy goals or tools of the policy in light of past experiences and new information toward the ultimate objective of governance (Hall, 1993). This approach considers learning as part of the normal policy process and the effort of policymakers to understand why their actions succeed or fail.

Heclo (1974) had a different vision of learning, a less conscious activity in response to changes in the social environment, a political adaptation process. As distinct from Hall’s previous idea, Heclo considers policy learning as an activity undertaken by policymakers, a reaction to external changes from which policymakers must adapt to succeed in their policies. A different approach is learning as "lesson drawing" (Rose, 1991), referring to the ability of policymakers to learn from other's experiences, analyzing the problem, and extracting lessons that help them to solve their problems in different sectors, issue areas, or jurisdictions.

Bennett and Howlett (1992), in their influential work, *The Lessons of Learning: Reconciling Theories of Policy Learning and Policy Change*, explored policy change under different notions of learning and offering different categories (in Table N.8). The authors claim, "The all-encompassing term 'policy learning' as it is often used at present can be seen actually to embrace three highly complex processes: learning about organizations, learning about programs and learning about policies" (p. 289). First, there is learning at the governmental level, in which state officials and policymakers are the agents of learning; this mostly focuses on process and the improvement of organizational dynamics or change. The next step is lesson drawing, in which agents are the policy networks and the foci are policy tools and instruments to improve the programs. Finally, social learning represents a broader conception of learning where the communities are learning about ideas that lead to a significant paradigm shift.
Table N.8. Categories of Policy Change and Policy Failure

<table>
<thead>
<tr>
<th>Type of learning</th>
<th>Who Learns</th>
<th>Learns what</th>
<th>To what effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Learning</td>
<td>State Officials</td>
<td>Process-related</td>
<td>Organizational Change</td>
</tr>
<tr>
<td>Lesson Drawing</td>
<td>Policy Networks</td>
<td>Instruments</td>
<td>Program Change</td>
</tr>
<tr>
<td>Social Learning</td>
<td>Communities</td>
<td>Ideas</td>
<td>Paradigm Shift</td>
</tr>
</tbody>
</table>

Source: Bennett & Howlett, 1992, p. 289

In a similar vein, but directly connecting failure and learning, Peter May (1992) thoroughly studied eight policy cases in the US reformulated after their failures, offering another categorization: instrumental, social, and political policy learning. *Instrumental policy learning* occurs by recognizing deficiencies of policy tools, instruments, or implementation design; this type of learning can be facilitated by adding learning instruments into policy designs, such as evaluations or hearings. *Social policy learning* requires rethinking about fundamental aspects of the policy, such as causal reasoning about policy problems and interventions. This review touches on the core values and fundamental social construction of a problem and the policy. As May (1992) claims, “Demonstrating social learning requires showing that the dominant policy elite’s beliefs have either been altered or reaffirmed in light of policy experience” (p. 338). Finally, *political learning* requires that policy elites and advocates learn about their failure to move toward new policy ideas, implying an in-depth revision of the feasibility of the policy and the relationship between past strategies and their impacts. In this framework, neither form of learning is necessarily antecedent to the other.
**Organizational Learning**

Research on learning from failure has been a common topic on organizational literature. The foundational work of Levitt and March (1988), *Organizational Learning*, stated that organizational behavior is guided by routines, rules, strategies, and technologies that shape and constrain change within organizations. The authors noted three important characteristics of organizational learning: “routine-based, history-dependent, and target-oriented” (p. 319). The first characteristic of organizations is that routines are based on interpretations of the past and anticipations, thus organizations respond in an adaptive reinforcement process. As a result, the second characteristic is that organizational action and learning is history-dependent, and change requires time and accumulated experience until new practices can reflect the experience. Thus, “learning from failure it is an imperfect process meaning that is path dependent and therefore somewhat sluggish. Organizations are often unable to change or adapt quickly and perfectly to lessons from experience; thus experience and action are often disconnected” (Desai et al., 2017, p. 7). The third characteristic is that organizations are oriented toward reference points; organizational behavior depends on the relation between the outcomes observed and certain expectations, or targets (Levitt & March, 1988).

Complementary to those characteristics, organizational behavioral theories introduce issues of power, conflict, and bargaining into the learning process within the organization. Usually, failures are defined by the focus of powerful observers. Different groups might experience certain events differently and even have contested interpretations, and therefore organizational goals shift over time, reflecting the dominant coalition’s interests. In this way,
“what constitutes a failure and how organizations respond when a failure occurs, both tend to change with respect to organizational power dynamics” (Desai et al., 2017, p. 5).

Another point of interest in organizational literature is the relationship between disasters or accidents and learning. Busenberg (2001) investigates the relationship between failure and learning by exploring the role of “institutional arrangements” that promote or constrain individual learning when faced with incidents or accidents that act as “focusing events” (Birkland, 1997). Through an examination of cases, the study claims that both focusing events and operation of learning arrangements can be linked to an enhanced policy process.

In the work Organization at the Limit: Lessons from the Columbia Disaster, Starbuck and Farjoun (2009) take an intensive look at the organizational process that contributed to the Columbia disaster. One of the findings is that organizations enthusiastically learn from successes, but they become unrealistically overconfident. This attitude becomes increasingly inappropriate given their evolving contexts, leading to failure. Another finding is that large organizations have great difficulty learning from failure because managers interpret the causes of failure as external and idiosyncratic. The analysis warns about the risk of repeating mistakes and the importance of continual learning, because: “An organization that does not see, analyze, and solve problems, is likely to repeat its failures” (2009, p. 355). The evidence shows that ineffective learning in organizations can precede failures and even perpetuate them.

From a systemic point of view, Kay and Boxall (2015) explore the nature of learning from failure by distinguishing two mechanisms whereby past policy failures count as feedback to future improvements: change in beliefs and deinstitutionalization. The first
mechanism is the widely accepted conception that learning from the past enables future policy to overcome failure. However, there is no guarantee that actors will draw the right lessons from failure because, given the entrenched beliefs of stakeholders and policymakers that created prior policy, there only will be learning if those beliefs changed upon consideration of the outcomes. As Kay and Boxall (2015) claim, “Learning concerns the capacity of actors to reflect on, and draw accurate and useful lessons from, the policy processes within which they are involved” (p. 36). The second mechanism for learning from failure is related to the deinstitutionalization processes. Some policies fail slowly and imperceptibly, undermining the political support and the context of their action, leading to a gradual weakening of the institution. Kay and Boxall (2015) emphasize that “failures are both a symptom but also a cause of deinstitutionalization. Where learning breaks the paradigm is the interesting point, when social learning takes over from instrumental learning that we see change” (p. 39).

There is an agreement in the literature about the importance of differentiating policy learning types and further exploring characteristics and dimensions that have not been studied enough (Stronks et al., 2006; Dunlop & Radaelli, 2013; Howlett et al., 2015). Those distinctions are crucial to identifying what policies can be corrected via instrumental or technical learning and which are not, requiring a different approach (Howlett et al., 2015).

**The context of Learning**

Dunlop and collaborators' recent and influential work is a leap forward in policy learning research (Dunlop, 2017a, 2017b; Dunlop & Radaelli, 2013, 2018a, 2018b). One key contribution is the identification of the different contexts in which learning occurs. There are four varieties of learning: epistemic (based on authoritative or expert knowledge), reflexive
(learning from reflection based on argument, thought, and dialogue), bargaining (learning as by-product of bargaining resources), and hierarchical (learning through rules of formal authority). These contexts are key for understanding why and how learning occurs, and in the authors' point of view, this should be the starting point for any policy learning analysis. As they state, “We suggest to start from capturing the context and then moving on to learning [...] it is important to understand the tone of the policy process in order to get learning right” (Dunlop & Radaelli, 2018b, p. 268).

Besides, there is an increasing interest to consider the structural, systemic or societal levels of analysis, something not much pondered by analysts in the past. There are persistent policy failures, despite some learning and transformations to correct them, some policies keep repeating the same mistakes. Likewise, some organizations cannot learn from failures or even fail again after learning (Desai et al., 2017). Echoing the words of Howlett, Ramesh, and Wu (2015): "the persistence of such failures may be addressed through enhancing the capacity of policy actors and better designing policy processes and institutions to recognize and overcome common sources and types of failures. Better understandings of these ‘meta' factors can offer policy makers critical insights about institutional design and the reforms needed to avoid consistently poor policy outcomes" (p. 211).

2.5. Literature Review: Summary and Key Elements

This chapter offered a broad review of literature encompassing policy failure. The examination of the various frameworks of analysis, the characteristic elements of policy failure, and the exploration of the link between policy failure and learning revealed a persistent interest in understanding the nature, causes, and characteristics of policy failures.
This section summarizes the essential elements, highlighting areas of contributions for this dissertation.

The first section of this chapter reviewed how social and policy sciences have understood policy success and failure over the last decades, showing approaches from different research streams and diverse case studies of policy failure. By reviewing the ideas of academic traditions, this analysis recalls significant contributions—such as the policy process, implementation, evaluation—as well as different viewpoints over what they understand as a failure. This perspective reinforces the idea that, although policy sciences have not always addressed policy failures directly, the inquiry into policy failure always been part of the policy science’s concerns.

In addition, the literature review presented frameworks that directly address policy failure, fiasco, or disaster. Each framework proposes a way of observing policy failure, as well as concepts and characteristics for understanding the phenomenon better. Consequently, each approach focuses on some elements of the failure, but also ignores others; this facilitates an analytical insight that provides valuable but limited contributions. These different ways of observing are like “lenses” to tackle the policy failure problem, an idea that is at the foundation of this dissertation.

This literature review identifies three moments that change the understanding of policy failure. First, Bovens and ‘t Hart have provided the influential contribution in the social construction of policy fiascos (1995, 1996, 2016). This work emphasizes the role of perceptions over the judgment of policy failure, which occurs via a complex process of meaning construction. This perspective persists in the literature, and also plays an important role in this dissertation. The second key moment relates to the recent and revitalizing work of
McConnell and collaborators (Marsh & McConnell, 2010; McConnell, 2010a, 2010b, 2011, 2016). By recognizing the epistemological and methodological conundrum in policy failure, this perspective states that, policy outcomes are not usually understood as unambiguous successes or failures, facts or interpretations or black or white; they mostly involve the “grey areas in-between” (2010a, p. 345). Thus, McConnell offers an integrated framework to tackle policy failure from the political, policy, and process point of view. This dissertation shares the conviction that the policy failure problem is convoluted and multidimensional, but unlike this approach, it does not attempt to simplify, but assumes the complex nature as a starting point. Finally, the third key moment in this literature offers a broader perspective emphasizing the role of institutional, systemic, and contextual elements over policy failure (Hindmoor & McConnell, 2013, 2015; Peters, 2015; van der Steen et al., 2015). Effectively, policy failures do not occur in a vacuum but embedded in cultural, institutional, and social contexts. The context in which a failure occurs it is meaningful and even determinant in understanding their occurrence, characteristics, and interpretations (McConnell, 2016; Oppermann & Spencer, 2016b). Hence, this dissertation rescues the importance of these institutional and societal dimensions to understand policy failure.

Another interesting distinction is the relationship between scholarly-oriented and policymaking-oriented research. These two sides of the policy failure research—academic and applied—are the base of the entire policy failure literature. Some approaches seek to build theoretical frameworks (Bovens & ’t Hart, 1996; McConnell, 2010b; Peters, 2015), and other approaches help decision makers to avoid or better face policy failures (Dunleavy, 1995; Gray, 1996; King & Crewe, 2013; Schuck, 2014; Light, 2014; Shergold, 2015). This dissertation aims to achieve a dual result; it attempts to distance itself from highly academic
analytical frameworks, seeking simpler and more intuitive ways to address the complexity of policy failure. Therefore, this study does not attempt to build theory, but rather, based on accumulated knowledge, to offer a more useful perspective to decision makers facing failure episodes.

The literature review presented numerous case studies of policy failures, most of them from Europe and the United States. The absence of Latin American research on this topic is striking. With very few exceptions (Olavarría-Gambi, 2013, 2018), there is no research on policy failures in Latin America. Therefore, this dissertation is a unique effort that contributes significantly to understand how policy failures unfold in the Latin-American setting.

In order to provide distinctions and finer concepts for this study, the literature review chapter presented characteristic elements of policy failure, deepening ideas and revealing how different kinds of literature grasp them. Some of these elements are: the assessment and judgment of damage caused by the policy failure; whether or not the failure was intentional; whether the event was anticipated and how avoidable it might have been; how visible the failure episode is and its public character; and an assessment of the responsibility of leaders and the government over the occurrence of the failure. An additional widely studied characteristic are the blame avoidance dynamics or "blame games." Another element is the role of time and the paradox that judgments about policy failure and success change. A final characteristic is the role of context on policy failures, something that literature hasn’t considered enough. Thus, to a greater or lesser extent, all these elements and their nuances nourish the analysis of the policy failure case of this dissertation.
Finally, policy failure is intimately linked to learning, and there are similarities and relevant connections between both bodies of literature. By focusing on the relationship between policy learning and failure, this review has identified significant contributions for this dissertation. This analysis showed that learning is something elusive and challenging, and policy failure does not necessarily lead to learning; or, even when there is learning, it is not the “right” learning.

Also, there are the questions of who learns, what is learned, and what is the effect of this learning. This literature distinguishes different actors—state officials, policy networks, and communities—, and types of learning—government, lesson drawing, and social learning—, as well as purposes of learning—organizational, program change, or paradigm shift—, and categories of policy learning from failures—political, instrumental, and social—where learning might or might not occur (Bennett & Howlett, 1992; May, 1992). Besides, policy learning literature studied some cognitive, organizational, institutional, and political barriers against learning, drawing attention to the persistence of policy failures and evidencing the challenges to truly learn from them. All of this provides intriguing insights for this study about analytical dimensions, the linkage of failure and learning, and reinforces the importance of learning-oriented policy failure frameworks.

This extensive literature review shows that this dissertation is part of this burgeoning stream of research on policy failures, contemplating useful concepts and perspectives to better understanding the phenomenon. From here, this dissertation:

- recognizes the complex and multidimensional nature of policy failures as a starting point, with all its epistemological and methodological tensions;
• observes that diverse analytical frameworks always account for certain assumptions or "lenses" that reveal elements of the policy failure, but it also ignores others. Therefore, the lenses depended on the purpose of the analysis;
• understands the dual nature of policy failure research—academic and applied—opting for an analytical approach, far from theoretical complexity, to be useful for policymakers;
• explicitly incorporates the institutional perspective and societal context as critical elements to understand policy failures;
• considers that the understanding of policy failure is closely linked to learning and therefore points to concepts and frameworks that promote this relationship;
• takes part in the existing research trend on policy failures through case studies, and contributes from a Latin American background.

Thus, based on these statements, the following chapter presents the analytical framework of the dissertation.
CHAPTER 3
LENSES TO UNDERSTAND POLICY FAILURE. ANALYTICAL FRAMEWORK

The previous chapter presented a detailed review of the policy failure literature. From different epistemological positions, and emphasizing varied dimensions of analysis, the policy failure stream of research has evolved. As a result, unveiled particular analytical elements and several statements have become the foundation of this dissertation. Along with the research questions, this chapter presents the Lenses Framework as the analytical device to investigate the 2012 census case in Chile.

3.1. Research Questions

This dissertation seeks to answer the following primary research question: How do we understand policy failure?

This research question yields two sub-questions: First, how do various lenses/perspectives understand policy failure differently? And, how does a multi-lens approach contribute to a better understanding of policy failure?
3.2. Lenses Framework

To answer these research questions and based on the lessons provided by the literature review, this dissertation offers a new analytical framework, called the Lenses Framework to explore the case of the failure of the 2012 census in Chile.

The Lenses Framework is a conceptual arrangement that provides structure to organize descriptive, investigative inquiry, but without losing the characteristic power of metaphors, which describe a phenomenon in an approachable, discoverable way or connected with real-life experiences (Goyal & Howlett, 2018). The simple idea of lenses refers to a “way of looking,” which involves the object of inquiry, epistemological assumptions, analytical tools, and belongs to a particular research tradition. The Lenses is an analytical exercise for understanding and framing a particular situation in multiple ways; therefore, it is a novel way of addressing social problems' complexity by revealing characteristics and dynamics that other approaches cannot observe. Thus, this framework recognizes that policy failure can be comprehended, and often is understood, in multiple ways or through various lenses, and upon that important recognition is precisely where this dissertation aims to contribute.

Using the analogy of architecture and lenses, if someone can only look at a house from one perspective—from the front, for example—the perception and understanding of that house is framed by that angle of observation. On the other hand, if someone can observe the house from several perspectives—for example, from the front, the sides, the top—the understanding of that house will be much more complete than the previous insight, and consequently much closer to its real complexity. Similarly, the Lenses approach allows capturing different dimensions of the policy failure problem that weren’t previously
identified. It is possible to recognize some particular nuances of policy failure through one of the lenses, and completely different findings appear via the other lenses. In Allison’s words (1999), whose work inspired for this study, “The glasses one wears magnify one set of factors rather than another in ways that have multifarious consequences. Not only do lenses lead analysts to produce different explanations of problems that appear, in their summary questions, to be the same. Lenses also influence the character of the analysis’s puzzle, the evidence assumed relevant, the concepts used in examining the evidence, and what is taken to be an explanation” (pp. 387-388). Like this, the Lenses Framework is an analytical device to investigate perspectives of the policy failure, which will engender a better understanding of the phenomenon overall.

Like the photography analogy, policymakers usually approach policy failures from particular angles and positions, their own lenses. Similarly, researchers commonly analyze policy failures from specific theoretical and disciplinary backgrounds, and perspectives of analysis, which also constitute lenses. Recognizing the limitations of partial perspectives in understanding and addressing policy failures' convoluted nature is the starting point of the Lenses Framework analytical exercise.

As stated in the literature review section, recent studies have asserted that failure and success are not binary values, or two poles, but rather extremes of a spectrum, and therefore plenty of nuances exist between them. This idea underscores efforts in the earlier literature to classify and frame features of a policy as a failure, fiasco, or blunder, and reorients attention toward understanding the policy failure phenomenon. No doubt policy failure literature has advanced significantly in distinctions, concepts, and detailed frameworks. However, much remains to be explored to promote an understanding to better face and prevent failure events.
Thus, the idea of the *Lenses* analytical exercise is indeed meant to contribute to addressing the complex phenomenon of policy failure, in a way that is more approachable for decision makers, and that facilitates learning. Based on the power of the figure of the *Lenses*, the proposed framework of analysis takes the advances of the literature and puts them at the service of a better understanding of policy failures from a pragmatic approach.

The types of lenses to use depend on: the questions of those who observe, what they observe, what purposes, and the object in question. The *Lenses Framework* encompasses the use of different lenses to examine the selected case of policy failure separately, and afterward, a comprehensive or “multi-lens” analysis to explore the case. Thus, based on the literature review and the particularities of the 2012 census case in Chile, the three lenses of analysis for this study are policy, organizational, and societal, presented in the Diagram N.4 below.

**Diagram N.4. Analysis of Policy Failure According to Different Lenses**
Consequently, the first step of the framework applies the three lenses of analysis separately. Each one of the lenses will provide different perspectives and comprehension of the nature and characteristics of the policy failure under study. The *policy lens* considers elements regarding the policy process using the heuristics of the policy cycle, in particular on the stages of formulation, implementation, and evaluation. Therefore, this first lens explores the programmatic dimension, paying attention to expectations, definitions of the goals, availability and allocation of resources, control mechanisms, and results, among others.

Likewise, the *organizational lens* alludes to those values, routines, and arrangements at the organizational level of the agency involved in the policy failure. Thus, this second lens analyzes the organizational structure, leadership, mission and values, culture and climate, power, and decision-making dynamics of the organization affecting the failure of the policy.

Finally, the *societal lens* observes the broader picture of the case and pays special attention to elements that are not usually considered, that is, the broader context in which the policy failure occurs. Hence, this third lens delves into the historical, ideological, and institutional dynamics that determine or shape the policy failure and the interpretations and meanings given by the actors to these context elements.

Hence, the first step of the *Lenses Framework* provides answers to the primary research sub-question: *how do various lenses/perspectives understand policy failure differently?* The three lenses approach can be seen as three layers of the case study or/and even as three different cases. Each of them has its particular foci, theoretical assumptions, and observes a distinctive type of evidence, and in the process, manifests significantly different insights. Table N.9 presents each of the lenses, their foci, unit of analysis, and a
### Table N.9, Three Lenses: Foci, Unit of Analysis, and Description

<table>
<thead>
<tr>
<th>POLICY LENS</th>
<th>ORGANIZATIONAL LENS</th>
<th>SOCIETAL LENS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus:</strong> This lens focuses on the policy and the elements that contribute or impede the proper achievement of the expected goals.</td>
<td><strong>Focus:</strong> This lens focuses on the organization that carries out the policy and its characteristics.</td>
<td><strong>Focus:</strong> This lens focuses on the contextual, historical, and cultural elements playing a role in the way that the policy is carried out.</td>
</tr>
<tr>
<td><strong>Unit of Analysis:</strong> The Policy</td>
<td><strong>Unit of Analysis:</strong> The Organization</td>
<td><strong>Unit of Analysis:</strong> The Societal Context</td>
</tr>
<tr>
<td>The policy is the 2012 population and household census in Chile.</td>
<td>The organization is the National Institute of Statistics, INE.</td>
<td>The institutions, history, and contextual elements of the Chilean and Latin-American setting.</td>
</tr>
<tr>
<td><strong>Description:</strong> Based on policy failure, policy analysis, public policy, and implementation and evaluation literature, this lens observes the census policy and several elements that impeded fulfilling the goals. The analysis follows the heuristics of the public policy cycle, i.e. formulation and design, implementation and evaluation. Some of the themes explored are: definition of goals and expectations, roles and participants on the implementation, availability and allocation of resources, supervision and control, evaluation criteria, among others.</td>
<td><strong>Description:</strong> Based on organizational literature (organizational failure, organizational sociology, organizational behavior, public management and organizational theory), this lens considers relevant factors of the main institution/organization affecting the census policy, i.e. the National Institute of Statistics. Some of the themes explored are: values and mission, organizational structure, leadership, power and group dynamics, capabilities and motivation, hierarchies and power dynamics, among others.</td>
<td><strong>Description:</strong> Based on sociological, neo-institutionalist, and institutional logics literature, this lens observes the role of societal context and institutions on providing meaning, legitimacy, and shaping practices and ideas that affected the census policy. Some of the themes explored are: the political context, the census and statistical institutionality, the social transformations of the country, the adoption and challenges of new institutional configuration, and the meanings and interpretations given by the actors to all these elements of context.</td>
</tr>
</tbody>
</table>

Source: Own elaboration
By focusing on each one of the lenses in turn, the study will deeper dig into the many layers of the policy failure, revealing the characteristics, tensions, and keys of analysis that arise from each perspective. From this particularities and findings, the analysis allows exploring differences and similarities between perspectives, and in that way, leading to the following step of the framework.

The second step of the Lenses Framework investigates the selected case of policy failure from a multi-lens perspective. This analysis assembles the respective findings from the individual lenses, but also focuses on the interactions, and other relations amongst those three lenses. For example, the analysis identifies feedback or reinforcing mechanisms between different analysis levels, the dynamic of tension between lenses, or even the absence of a relationship between some of them. All of this seeks to go beyond the linear or causal understanding of policy failure, exploring mechanisms not previously studied.

Assuming that there always are different views of a failure, the goal is to overcome the barriers between lenses, discover commonalities, and assemble dominating explanations to create a more profound and informed understanding of the policy failure case. Thus, multi-lens analysis enables us to analyze the failure problem from different perspectives conterminously, conceptualizing their parts and the interactions between them in an analytical exercise toward enhanced understanding. Therefore, this step of analysis seeks to answer the second of the research sub-questions: how does a multi-lens perspective contribute to a better understanding of policy failure? Diagram N.5 illustrates the multi-lens perspective of the Lenses Framework.
The diagram shows the *Lenses Framework* examining a policy failure case by the three lenses and then through the multi-lens approach. This integrated analysis requires the individual in-depth analyses, i.e. it is only possible on the basis of separate lens distinctions and findings. Thus, the new perspective incorporates the three previous lenses, and the complex interactions and relations among them. Therefore, the outcome not only exceeds the sum of its parts, but also is an altogether distinct approach.

One of the greatest strengths of the framework of the Lenses lies in its simplicity. While maintaining the power of the lens metaphor and the advantages of "looking" from different positions or perspectives, the framework offers concepts and distinctions to better understand the policy failure’ complexity and makes them available to decision makers. Therefore, this dissertation seeks to connect the accumulated knowledge with real
policymaking, which points to one of the foundations of the study, the pragmatic approach, briefly explained below.

3.3. Pragmatic Approach

The *Lenses Framework* is based on a pragmatic approach to policymaking, which seeks to connect the analytical understanding of the policy failure with the realpolitik and improvement of public policies. Pragmatism rejects the distinction between thought and action, and advocates for the construction of the meaning of concepts by their practical consequences (Zittoun, 2014). As Sanderson (2009) pointed out, “The key proposition of pragmatism is that the ‘validity’ of a belief or concept is defined in terms of its practical consequences, if we act upon a belief and our actions turn out for good, then that belief can be taken as ‘true’ in a pragmatic sense” (pp. 708-709).

Unfortunately, there is a lack of consistent translation from research to real policy; the world of ideas and academic research is far away from what policymakers are dealing with day-to-day. Some reasons for this distance are the overwhelming complexity of the policy process, the language gap between scientific research and policymaking, different timing and incentives of both worlds, among many others (Brownson et al., 2006; Henig, 2008). As Brownson et al. claimed (2006), “Even when research findings from research studies are clear and consistent, there are often multiple policy options. There is often little correlation between the quality of science and the policy derived from it” (p. 164).

It is important to recall that the distance between academia and policymaking is a longstanding concern in policy sciences. Almost 40 years ago, Lindblom and Cohen (1979) in *Usable Knowledge* analyzed the link between research in social science and problem-
solving and proposed professional social inquiry as a type of applied knowledge or a tool to advance the resolution of social problems. They write, “the stimulus that gives rise to this book is dissatisfaction with social science and social research as instruments of social problem-solving. Policy makers and other practical problem solvers frequently voice their frustration with what they are offered. And many social scientists and social researchers seem to wish to be more drawn upon, useful, or influential” (p.vii).

Hence, this is a two-sided problem, where each party identifying different barriers. On the one hand, policymakers and practitioners complain that research is not adequately focused on their practical concerns. Academic research fails to generate findings when needed, recommendations are too elaborate or complex languages, results are ambiguous and sometimes with confusing evidence, and research is published in journals that policymakers don't read. On the other hand, academics complain about the lack of impact of their research. Policymakers are resistant to perspectives that come from academia, lack the capacity to understand and use research, don't have the motivation to explore research to inform decision-making, and usually, their decisions are framed by dominant ideologies that prevent them from considering significant changes (Hammersley, 2005). According to Carol Weiss, some elements that facilitate the use of academic research in policymaking are: relevance of findings to the work of policy makers, conformity with the prior knowledge and experience, the overall quality of research–particularly resistant to criticism and discrediting–action orientation, and findings that challenge existing policies, which can be thought-provoking (Weiss, 1995).

In an interesting work about the contribution of research to the policy debate in the case of charter schools, Henig (2008) recognizes dueling cultures between research-think and
political-think, meaning, “One—that of the researcher—tends to add complexities and resist final closure. The other—that of the political actor—tends to demand straightforward and easily communicated lessons that will lead to some kind of action” (p. 222). However, these cultures are not pure forms; they are expressions of the expected roles or the incentives embedded in their institutions. There are plenty of politicians willing to learn from science to improve their practices, and likewise, scholars passionate about their research to make a change. Thus, just as there are distances, there are also connections and meeting points between those two worlds. Rather than the metaphor of these two separate communities, there are ranges of varied interactions where individuals value that connection more than others (Newman et al., 2016).

Given this distance between policy research and realpolitik, this dissertation aims not to build a unifying theory of policy failures, but rather to move towards a better and more useful understanding of policy failure. In a pragmatic sense, it is not an “instrumental” or “technical” exercise about what contributes to improving policy, but rather a domain of “practical” reason regarding what is “appropriate” given the circumstances.

Due to the complexity of policy failure and its epistemological thorns, this study seeks to understand how we comprehend policy failure, the various lenses used, and proposes a particular analytical device—the Lenses Framework under a pragmatic approach—to explore whether different lenses in turn, or a more comprehensive approach to policy failure, may contribute to teaching us from past failures.
CHAPTER 4
DATA AND METHODS

This chapter addresses the dissertation research design, methods, and data. First, it introduces the case study as the research approach and the qualities that make it suitable for this research. Then it explains the selection of the 2012 census case, presenting the features of the policy selected—the census—and the setting of the case—Chile. Following, it focuses on the data, describing the primary and secondary sources, including different types of documents and the interviews performed. Next, it introduces the method used to analyze the data, its characteristics, and the stages of the analysis. Then, it explains the validity mechanisms used to safeguard the quality of the study. Following that, it outlines the limitations of the study. And the final section offers some reflections over the researcher's position in this dissertation.

4.1. Research Strategy

This dissertation seeks to answer the research questions through qualitative analysis from a pragmatic perspective\(^1\). Based on a set of primary and secondary sources of

\(^1\) Different philosophical perspectives guide qualitative research. Some of these are: interpretative frameworks, post-positivism, social constructivism, transformative frameworks, postmodern perspectives, feminist theories, critical theory, critical race theory, queer theory, disability theory and pragmatism (Creswell & Poth, 2018).
information—in-depth interviews, documents, media—the dissertation is positioned in a particular research strategy: the case study approach.

**Case Study Approach**

The case study approach is a comprehensive research strategy seeking to understand larger phenomena through an intensive and in-depth examination of a specific instance or event, called the "case" (Stake, 1995; Yin, 2014). Robert Yin (2014) states: “The case study as a research strategy comprises an all-encompassing method—covering the logic of design, data collection techniques, and specific approaches to data analysis. In this sense, the case study is not either a data collection tactic or merely a design feature alone but a comprehensive research strategy” (p. 14).

This approach is especially suitable when the research questions correspond to questions like "how" or "why," focus on contemporary events, and do not require control of other events (Yin, 2014). Moreover, unlike other research approaches, case studies rely on various techniques to gather data, from multiple sources with different perspectives to generate detail and a thick description of the case (Creswell & Plano Clark, 2007; Yin, 2014). The flexibility and multifaceted character for the use of information is what distinguishes case studies from other approaches. Along these lines, the case study is consistent with the pragmatic approach. Creswell and Poth, stated that researchers using the pragmatic perspective “will use multiple methods of data collection to best answer the research question, will employ multiple sources of data collection, will focus on the practical implications of the research, and will emphasize the importance of conducting research that best addresses the research problem” (2018, p. 27). Another characteristic of case studies, is the importance of the context. As stated by Yin definition, “case study investigates a
contemporary phenomenon (the “case”) in its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident” (Yin, 2014, p. 32). Unlike other methodological approaches that isolate the phenomenon of study from its context, case studies observe the social, cultural, political and economic variables of the case, as well as its historical features.

This dissertation proposes the *Lenses Framework* to analyze a case. This idea of exploring a case, containing multiple distinct "cases" is linked to Yin's (2009) concept of *embedded units of analysis*, which recognizes case studies where the data come from different layers. Usually, they are cases with abundant information from different levels, but pointing to understanding a single or main case. Throughout this approach, the research process allows addressing, layer by layer—case by case—the complexity of the larger case of the census in Chile.

A common criticism of case studies is the representativeness of their findings. However, the case studies focus is not on representativeness in a statistical sense or the prospect of extrapolating results, but on the opportunity to learn comprehensively. It is not about the number of cases or the sample's characteristics because the case study is not a sampling method (Stake, 1995). The contribution of a case considered “typical” can be as enlightening as a case considered “unusual.” What is essential is that the case selection should be theoretically driven (Eisenhardt & Graebner, 2007). Thus, the choice of the 2012 census case is not random but theoretically inspired by policy failure literature, and the research questions of this dissertation.

Another criticism of case study is their lack of generalizability. However, this claim is strongly biased by a quantitative-positivist approach of research because generalizing from
samples to universals is not the only way to generalize in social science. Case studies offer “analytical generalizations” that seeks to deepen and generalize theories and not extrapolate statistical generalizations (Yin, 2014). The complex and rich understanding of the case can be transferred or applied to other contexts or similar conditions, and therefore case studies are about “transferability” and not generalizability (Bloomberg, 2018). Consequently, the initial theoretical ideas about understanding policy failure are enhanced by the census case; and thus the study contributes to analytical generalization from corroborating, modifying, rejecting, or advancing toward new ideas that arose from the case. For example, the single case study about the Cuban missile crisis of 1962 is not generalizable to the use of missiles or the US–Cuban relationship, but the theoretical propositions of this work allow the transferability of their findings to extend beyond the case to the decision-making process under crisis, and models of decisions (Allison & Zelikow, 1999; Yin, 2012, 2014). Similarly, the case study of the 2012 census in Chile from the Lenses Framework, seeks to contribute to a better understanding of policy failures in other policy areas and latitudes.

Case studies, whether single or comparative, have been the most explored methodological approach in the still incipient field of policy failure research. Some of the best-known single cases involve the Challenger explosion (Boin, 2008; Vaughan, 1997), the Poll-tax policy in Britain (Dunleavy, 1995; King & Crewe, 2013), the US Employment Policy in 1945-82 (Mucciaroni, 1990), the financial crisis in 2008 (Hindmoor & McConnell, 2013, 2015), the housing transfer in Glasgow (Kearns & Lawson, 2009), and the transportation reform in Santiago (Olavarría-Gambi, 2013, 2018) to name a few. Likewise, some comparative case studies of policy failures are: the eight cases in the UK (Dunleavy, 1995), the 26 fiasco cases all over the world (Bovens & ’t Hart, 1996), the 24 cases in
European countries (Bovens et al., 2001), the seven cases in British educational system (Richardson, 2007), the four policy reforms in the Netherlands (van der Steen et al., 2015), the four cases of critical areas of policy delivery in the UK (Wajzer et al., 2016), the 41 failures of the federal government in the US (Light, 2014) among many others; some of these single or comparative case studies were stated in the literature review section. From a case study approach, the analysis of the 2012 census failure in Chile will become part of this case-based stream of research.

4.2. The Case

According to the interests, case studies are intrinsic or instrumental. *Intrinsic cases* are characterized by an inherent interest in the case, on the part of the researcher, and a desire to explore the case deeply. *Instrumental cases* are defined by the researcher's desire to achieve something beyond the understanding of the particular case. The dissertation focuses on a theoretical issue of concern and then selects a bounded case to illustrate and pursue the issue (Stake, 1995). While understanding policy failure is a broad area of research, this study has an *instrumental* interest in the case of the 2012 census. As Walton (1992) claims: “cases come wrapped in theories” (p. 211), meaning that case studies aim to demonstrate how some general social forces, or theories, take place in particular settings, shaping and generating results. Accordingly, the case of the census in Chile was theoretically selected. The events, causes, and features of the census case will be the means to examine broader distinctions about policy failure, and contribute to the literature in the field. Following is a brief description of the policy—the census—and the context or setting of the study—Chile.
The Census Policy

Censuses have a long and extended history. Clay tablets found in ancient Babylon suggested that censuses were conducted at least 6,000 years ago (UNECE, 2015). Egyptians undertake censuses from around 2,500 BC mostly to allocate the land near the Nile and calculate the workforce to build the pyramids. Similarly, Greeks, Chinese and Romans also conducted census regularly by recording all individuals and their details through the competition of population lists (Valente, 2015).

With history, censuses have evolved. The 17th century led to the “imperial censuses,” where French, British and Spanish authorities undertook censuses to oversee the development of their settlements in the colonies. In the 18th century, the censuses allowed authorities to monitor the growth of countries and colonies. However, none of the censuses taken before the 19th century considered the aboriginal population, and most of them were male-census—not including information of the family or household composition—and therefore, according to Thorvalsen (2017) these were not proper censuses, but pre-censuses or “census-like” materials.

Thus, modern forms of the census can be traced to the 19th century, when nations started to conduct censuses using statistical methodologies systematically, and later on, when countries agreed on international definitions and recommendations (Baffour et al., 2013).

In the core aspects, modern censuses are no different from these versions of the ancient world, and the information is still collected throughout the territory of a country in a relatively short time. Thus, Whether it is for military conscription, taxation, allocation of lands, administrative or labor purposes, “the census has never just been about counting the
population. Even early versions of the census helped codify the relationship between the state and its subjects” (Kukutai et al., 2015, p. 6).

There are censuses of population, housing, agriculture, among many others, but the term “census” more often refers to population censuses, and countries usually undertake their housing and population censuses together. Following are the definitions according to the UN:

A population census is the total process of planning, collecting, compiling, evaluating, disseminating and analysing demographic, economic and social data at the smallest geo-graphic level pertaining, at a specified time, to all persons in a country or in a well-delimited part of a country (UN, 2017, p. 2).

A housing census is the total process of planning, collecting, compiling, evaluating, disseminating and analysing data relating to the number and condition of housing units and facilities as available to the households pertaining, at a specified time, to all living quarters and occupants thereof in a country or in a well-delimited part of a country (UN, 2017, p. 3)

Consequently, the questions population and housing censuses seek to answer are: How many are we? Who are we? and Where do we live? (UN, 2017), which comprises counting and characterizing the population within the territory. Following the Table N.10 presents the essential features of a population census:
Table N.10. Essential Features of a Census

- **Individual enumeration.** Each individual and set of living quarters should be enumerated separately (and separately recorded). This requirement can be addressed by different methods.

- **Universality within a defined territory.** The census should cover a precisely defined territory, including every person present and/or living within its scope. This does not prevent the use of sampling techniques.

- **Simultaneity.** The enumeration of persons and living quarters should be as of the same well-defined point of time, which can be a day or a more extended period.

- **Defined periodicity.** Census should be taken at regular intervals to allow comparisons and estimations. Countries should attempt to undertake census at least every 10 years—in years ending in “0” or time as near to those years as possible. However, some countries may find it necessary to conduct census more frequently.

- **Capacity to produce small-area statistics.** The census should produce data down the lowest appropriate geographical level, and for small population groups, all the while protecting the confidentiality of information of each individual.

  Source: UN, 2017 (pp. 19-20)

Censuses are always undertaken by the national government, often under the auspices of a National Statistical Office (NSO) and play an essential role in state governance, providing vital information about the size of the country, social demographic characteristics and spatial distribution. According to the UN (2016, 2017), the census has several roles and uses: i) To provide the data essential for planning, policymaking and administration. Census results are critical reference “to ensure equity in distribution of wealth, government services and representation nationwide” (UN, 2016, p. 8). ii) The census constitutes the principal source of records to constructing the master sampling frame, from which depends on surveys and several official statistics. iii) The census generates statistics on small areas and small
population groups with no/minimum sampling errors, which is a key strength of a census compared with other statistical instruments. iv) Census results are the base for research and analysis, as well as the generation of benchmarks, particularly population projections. In this way, censuses are policies with a strategic role for countries, and all social actors benefit from quality census data, including government, academia, the corporate sector, civil society, and individuals.

There is an increase in the number of countries undertaking censuses. In the 1990 census round (covering from 1995 to 2004), 31 of 241 countries did not conduct censuses, and in 2010 round (from 2005 to 2014) the number declined to 12 countries. The ubiquity of the census reflects the systematic effort of international and regional agencies supporting countries to conduct a census at least every ten years (Kukutai et al., 2015).

All countries face the permanent challenge of obtaining better data with their censuses and able to capture each time more complex social diversity (Baffour et al., 2013).

Historically and until 1970, population censuses were conducted exclusively using the traditional approach, that is, “all individuals are enumerated directly and their characteristics are registered through the completion of census forms. The information is collected in the field at the same time across the whole country, usually over a period of a few days or week” (Valente, 2010, p. 2). However, this situation has changed. In the last two decades, in OECD countries and especially in Europe, the census discussion pointed out to the growing challenges of census taking, such as: the high costs of censuses, the concerns about intrusiveness, the decrease in response rates, the difficulties in enumerating unsafe areas, the growing difficulties ensuring cooperation and public participation, among others. All these difficulties have led countries to use other census modalities, particularly the replacement or
complement of census data by administrative registers (Coleman, 2013; Skinner, 2018; Valente, 2015). Table N.11 below describes different census methods used by countries.

Table N.11. Diversity of Census Methods

1) **Traditional census**: all individuals are enumerated by filling out census forms. Information is collected at the same time in the country through de jure or de facto approach. In some countries filled by the respondents, and in others by enumerators who act as interviewers, and more recently also answering via web questionnaire. Examples: Latin American countries, the UK, Portugal, Hungary.

2) **Long-form & short form**: all individuals are enumerated. A long-form applied to a sample, and short and more detailed information filled by the majority of the population. For example, Canada.

3) **Register-based censuses**: all the population is measured based on information from combined administrative registers (usually at the individual level). Examples: Denmark, Finland, Sweden & Norway.

4) **A combination of register & full enumeration** uses complete enumeration, and administrative registers, simultaneously allowing improved precision of the count and the quality of the records. Examples: Italy, Czech Republic, Lithuania, Spain.

5) **The “virtual census”** is a variant of the previous approach but without field operations. It is a combination of register data with existing surveys. Created by the Netherlands in 2001, and also applied by Slovenia.

6) **Register data & ad hoc surveys**, this is an enumeration based on administrative registers combining with focused surveys to evaluate the accuracy and completeness of the registers, and/or to include new variables. Israel has used this approach since 2008.

7) **Traditional full enumeration & yearly updates**: this is a variant of the traditional census design. It involves full field enumeration every ten years combining with an extensive household sample survey on an annual basis —the only country currently applying this approach in the United States.

8) **Rolling census**: only used in France since 2004. This strategy is a combination of full census, and surveys applied to samples of small and large municipalities, along five consecutive years.

Source: Valente, 2010; Baffour, King, & Valente, 2013

In the 2010 census round (covering the period from 2005 to 2014), among the 40 European countries, almost half of them abandoned the traditional form of census, five
countries conducted their censuses based exclusively on registers, 13 adopted a mixed approach using data from records and other sources, and France implemented the rolling census (Valente, 2010; UN, 2013; Coleman, 2013). Thus, global figures show a decrease in using the traditional census, from 200 countries in 1990 to 188 in 2010, increasing the use of alternative methods, from eight countries in 1990 to 39 in 2010. However, alternative methods is concentrated in European countries, and the progress toward new census methodologies in the rest of the world has been limited (Kukutai et al., 2015).

Despite the importance of census transformations at the global level, Latin America remains using the traditional forms of census with variants of the de facto or de jure approach. While both are under the category of traditional forms of census, de facto and de jure censuses have significant methodological and logistical differences. The de facto census is applied in the whole country in a single day by trained volunteers, asking, "Where did you sleep last night?" and thus, considering where the person slept at a specific moment in time. In the de jure, the census enumerates people of the country regarding their usual residence, asking, "Where do you usually live?" and applied by employed, i.e. paid, specially trained interviewers, in a period of three-month application (Chackiel, 2009). Thus, there is a strong tendency to carry out de jure censuses in the region, and the case selected for this dissertation, the 2012 census in Chile, addresses the shift from de facto to de jure census mode.

In the census 2010 round, only five Latin-American countries out of 20 performed the de facto census approach: Argentina, Ecuador, Panama, Peru and Bolivia; the remaining
countries of the region applied de jure approach (CEPAL, 2014). Whether the de jure or the de facto, traditional forms of census are highly complex undertaking, this is what the UN states:

The traditional census is among the most complex and massive exercises a nation undertakes. It requires mapping the entire country, mobilizing and training an army of enumerators, conducting a massive public campaign, canvassing all households, collecting individual information, compiling vast amounts of completed questionnaires and analysing and disseminating the data (UN, 2017, p. xv)

There is constant and stimulating thinking on improving censuses from both the specialized academic literature and the applied experience of censuses in different countries. There is a community of knowledge, led by the United Nations, through World Programmes of Population and Housing Censuses, to generate research, to promote debate and discussion to facilitate the encounter of countries, guiding them toward better ways of censing, analyzing and use census data (UN, 2009, 2017; CEPAL, 2011a, 2014). The topics are diverse: the design of questionnaires and specific questions, enumeration approaches, strengthening national capacities to conduct censuses, citizen support and census campaigning, error measurements, corrections and statistical imputation methods, uses of the census, among many others. It combines specialized research—demography, statistics—and census policies, where the experience of previous censuses and the successes and failures of

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2 In the 2010 census round, México, Argentina, and Brazil complemented their census with an extensive survey administered to a sample.
different countries provide technical and practical grounds to develop better census methodologies.

**The Chilean Setting**

Chile has a recognized quality of public policies, democratic stability, economic growth, low corruption, and other particular conditions that positioned the country as a leader in the region in recent decades. Thus, the failure of the 2012 census challenges a series of assumptions regarding policymaking, presenting a powerful case to explore. This section describes essential characteristics of the Chilean political administration and other relevant features of the Chilean setting.

Chile is a long and narrow South American country with 18 million people, where more than 7 million live in the city of Santiago (INE, 2018c). Following, the Map N.1 presents Chile in its regional context, with Argentina, Bolivia and Peru as its neighborhood countries. Besides, the map highlight Chile's particularly geography, the divisions of the country's 16 regions with the Metropolitan region of Santiago, its capital, located at the center of the country.
Most of the population (87.7%) lives in urban areas, and 12.8% of Chileans consider themselves belonging to some native or indigenous people, and of these, the majority to the Mapuche people. By 2017, 4.35% of the population was international immigrants, two-thirds of whom arrived in the country between 2010 and 2017 (INE, 2018c).

Chile is a Democratic Republic under a Presidential regime with a bicameral congress. The country had an institutionalized party system with distinct ideological differences in two relatively stable coalitions, low polarization levels and programmatic parties (Olavarría-Gambi, 2016). The country has an Exaggerated Presidentialism–the powers concentrated in the executive are formally granted by the constitution–which has led to a great influence of the president on the legislation (Fuentes, 2015). Since the peaceful and
successful recovery and installation of its democracy in 1990 after 17 years of dictatorship, the country has been one of the most stable democracies in Latin America; as Castiglioni and Rovira point out, "the comparative literature on Latin American politics usually considers Chile as one of the countries of the region with the most stable party systems and strongest political institution" (2016, p. 4). Table N.12 summarizes the main characteristics of the Chilean political administration.

**Table N.12. Characteristics of Chilean Political Administration**

<table>
<thead>
<tr>
<th>Public Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile is a unitarian country, a democratic republic. The country is divided into 16 territorial units called Regions, and each of them is in charge of an intendant, which is appointed by the President of the Republic. The regions are divided, in turn, into provinces that are in charge of a governor, and these are finally divided into 346 communes, which are directed by a mayor elected by popular vote.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Executive power</th>
</tr>
</thead>
<tbody>
<tr>
<td>The President of the Republic is chief of the State and head of government. The President is elected by direct ballot, and needs an absolute majority of the valid votes, and for that, there is a two-round system election. Therefore, in order to win the election in the first round, the winning candidate must have more than 50% of the valid votes, if not, the two more voted candidates compete in a second election or “balloting” and the candidate with the majority of valid votes is elected President. The presidential term lasts four years without immediate reelection, but in the subsequent period (SERVEL, 2020).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Legislative power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislative power resides in the President and the National Congress, which is bicameral (Senate and Chamber of Deputies) and located in the city of Valparaiso. Since the reform of 2015, the Senate consists of 50 senators from 15 electoral circumscriptions, elected by popular vote and who remain in office for eight years with the possibility of reelection. The main function of the Senate is to concur with the chamber of deputies in the preparation of laws and approval of international treaties (Senado, 2020). The Chamber has 155 members elected by popular vote corresponding to 28 electoral districts. Deputies remain in office for four years with the possibility of reelection. The main function of the Chamber is to legislate with the Senate and the President, and also has the attribution of supervising the act of government and exercise control over public authorities (Cámara de Diputados, 2020).</td>
</tr>
</tbody>
</table>
About the economy, Chile is one of the most prosperous and stable countries in Latin America and the Caribbean. The country has the highest per capita GDP in the region, controlled inflation with rates below 3%, and 7% unemployment (below the regional average of 8.4%) (ILO, 2019; WorldBank, 2020; Banco Central, 2020). Consistent with these figures, the 2018 World Economic Forum (WEF) report shows Chile's good position in the world competitiveness scene, with the best performance in the region, and taking 33rd place in the world ranking. Moreover, from the 140 countries, the report highlights Chile in macroeconomic stability (1st), product market (12th), financial system (20th), health (30th), and the quality of institutions (32nd) (WEF, 2019).

Regarding education, the average level of schooling for Chileans reaches ten years, the graduation rate in high school reaches 87%, and 29.8% of the population over 25 years reached tertiary education (OECD, 2020). Health indicators also show good figures, the life expectancy at birth reaches 80 years (even higher than the US), infant mortality rate of 5.7 (per 1000 live births), and immunization coverage for children under one year of age reaches 93% (OMS, 2019; WorldBank, 2020). United Nations observes a "very high" human development index HDI of 0.84 (1 is high development), placing Chile 44th in the world and first in Latin America and the Caribbean.

In addition, Chile's levels of corruption are low. According to the Corruption Perception Index of Transparency International (2020), on a scale of 0 (highly corrupt) to 100 (very clean), Chile scored 67 and ranked 27th out the 180 countries evaluated. Moreover, for the democracy index developed by the Intelligence Unit of The Economist, the country recently scored 8.08 (10 is full democracy) and ranked 21th out 165 countries, reaching
category of “full democracy,” due to the recent outbreak and social mobilizations in October 2019 (The Economist IU, 2020).

Poverty reduction is one of the country's most recognized achievements in recent decades. While in 1990, 38.6% of households lived in poverty, thanks to growth and well-targeted public policies, the poverty rate in 2015—with comparable methods—decreased below 10% (CASEN, 2018; Urzúa, 2018). However, the country exhibits worrying levels of income inequality. Despite the slow but progressive decrease in inequality in recent years, from 101 countries studied, Chile appears to be one of the ten most unequal countries in the world (WorldBank, 2016), and in 2017, the GINI index reached 46.6 (WorldBank, 2020). Gender inequality is also a problem, the gender gap is 2.3 times that of countries with very high human development, and the gender inequality index reaches 0.32 (0 is greater equality), understood as the loss of human development due to inequality in the achievements of men and women (UNDP, 2018).

Since 2006, the Inter-American Development Bank (IADB) developed a policy index to assess the quality of different countries' public policies. The index encloses the following key features: policy stability, policy adaptability, policy coordination and coherence, policy implementation and enforcement, policy efficiency, and public—regardless of policies. The policy index spots Chile as the country with the best quality of public policies in the region—followed by Uruguay and Costa Rica—placing it in the group of countries with "high" quality policymaking in the world (Stein et al., 2006; Franco & Scartascini, 2014). Following, Table N.13 below summarizes relevant indicators of Chile.
Table N.13. Chile’s Relevant Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Data</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population:</td>
<td>18,054,726 at the 2017 (INE, 2020)</td>
<td></td>
</tr>
<tr>
<td>GPD per capita:</td>
<td>25.283 dollars at 2018 (WorldBank, 2020)</td>
<td></td>
</tr>
<tr>
<td>Annual GDP growth:</td>
<td>3.28% in 2018 (WorldBank, 2020)</td>
<td></td>
</tr>
<tr>
<td>CPI, annual Consumer Price Index:</td>
<td>2.8 in 2018 (Banco Central, 2020)</td>
<td></td>
</tr>
<tr>
<td>Global competitiveness Index:</td>
<td>70/100 (rank 33/140) (WEF, 2019)</td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate:</td>
<td>7% in 2018 (ILO, 2019)</td>
<td></td>
</tr>
<tr>
<td>Poverty Rate:</td>
<td>10.7% (CEPAL, 2019)</td>
<td></td>
</tr>
<tr>
<td>Gini Index (WB estimation):</td>
<td>46.6 at 2017 (WorldBank, 2020)</td>
<td></td>
</tr>
<tr>
<td>Indigenous People:</td>
<td>12.8% at 2017 (INE, 2018c)</td>
<td></td>
</tr>
<tr>
<td>Corruption Perception Index:</td>
<td>67/100 at 2018 (Transparency Int., 2020)</td>
<td></td>
</tr>
<tr>
<td>Democracy Index:</td>
<td>8.08/10 at 2019 (The Economist IU, 2020)</td>
<td></td>
</tr>
<tr>
<td>Secondary Graduation rate:</td>
<td>87.12% at 2017 (OECD, 2020)</td>
<td></td>
</tr>
<tr>
<td>Average Schooling (years):</td>
<td>10.02 at 2017 (INE, 2018c)</td>
<td></td>
</tr>
<tr>
<td>Life expectancy at birth:</td>
<td>79.73 at 2017 (WorldBank, 2020)</td>
<td></td>
</tr>
<tr>
<td>HDI, Human development index:</td>
<td>0.84/1 at 2017 (rank 44th) (UNDP, 2018)</td>
<td></td>
</tr>
<tr>
<td>Gender Inequality Index:</td>
<td>0.32/0 (rank 72th) (UNDP, 2018)</td>
<td></td>
</tr>
<tr>
<td>Policy Index (IADB)</td>
<td>“High” at 2014 (Franco &amp; Scartascini, 2014)</td>
<td></td>
</tr>
</tbody>
</table>

The above description shows that Chile reached significant economic, social, and institutional progress, standing out from its peers in the Latin American region. Despite these leading indicators, the 2012 census was considered a colossal failure, which led to discarding the collected data and conducting a new census in 2017. Thus, through the Lenses Framework, this dissertation explores this particular case, delving into the dynamics of census policy, the organization of the National Statistics Institute, and the social and institutional context that led to the failed census.

4.3. Data

The use of multiple sources of information is another particular feature of the case studies, which is even considered a “principle,” as it helps to deepen the understanding of the
phenomenon under study from different formats and points of view (Yin, 2014). In line with this approach, this dissertation relied on multiple sources of information and data collection strategies, combining secondary and primary sources of information: documents, media records, and in-depth interviews with INE participants and stakeholders. Further detail about these sources is provided below.

**Secondary Information**

Abundant and diverse types of documents were collected for this dissertation—a set of information from the National Institute of Statistics including reports, official mandates, and legislation; also included were INE internal information, such as letters, e-mails, meeting minutes or memorandums; as well as several evaluations, audits, and other inquiries. This secondary information was collected on an extended period (from 2015 to 2019), and was relatively easy to gather since by law it must be publicly available. Thus, most of the documents were available on websites or different public platforms, and other information was requested following the transparency law N.20,285 and their procedures (Transparencia, 2020). Complementary to this, another secondary source of information for the study was the media, including regular news, specialized journalist research reports, news videos, blogs, radio interviews and news, social media, and political opinion pieces.

All of this information was collected in digital format (or converted to digital form) for further analysis, supported by qualitative data analysis software Atlas.ti (2017). More than 700 items were collected ranging from the preparations of the 2012 census with the initial “de jure” enumeration strategy (starting from 2010) to the most recent discussions and news about methods and the data quality gathered in the 2017 census and other statistical
challenges of the National Institute of Statistics (until mid-2019). Following, Table N.14 presents the secondary data collected.

<table>
<thead>
<tr>
<th>Type of Information</th>
<th>Num. Instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>INE documentation</td>
<td>52</td>
</tr>
<tr>
<td>Letters and emails</td>
<td>14</td>
</tr>
<tr>
<td>Presentations</td>
<td>23</td>
</tr>
<tr>
<td>Inquiry and assessment reports</td>
<td>17</td>
</tr>
<tr>
<td>Testimonies (Hearings)</td>
<td>12</td>
</tr>
<tr>
<td>Video and audio pieces</td>
<td>35</td>
</tr>
<tr>
<td>Blogs and opinion pieces</td>
<td>63</td>
</tr>
<tr>
<td>Media (articles, chronicles, news)</td>
<td>525</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>742</strong></td>
</tr>
</tbody>
</table>

Source: Own elaboration based on the registers of collected data.

The use of these diverse sources of information was essential for thorough case analysis, allowing: to identify moments and actors of the case, to distinguish points of view and positions of the actors at the very same time that events occurred, to capture the ideas and perceptions of relevant stakeholders and social actors, to explore elements of the political, institutional, and social context of the case, to examine specific issues, and finally to check information among different sources.

**In-depth Interviews**

The most important sources of information of this dissertation are in-depth interviews of INE officials, stakeholders, and other relevant informants on the census case. Based on previous analysis of the case and oriented by the research questions, the selection of participants was a purposeful sample (Schutt, 2011), including different types of actors
linked to the 2012 census from different roles and stages of the policy. These actors included INE Directors, INE high officials, political and statistical advisors, INE professionals, members of the census team, authorities and high officials of the central government, members of the different inquiry commissions, experts and scholars, and finally other organizations—including the media, Chilean Society of Statistics (SOCHE), the General Comptroller of the Republic, and the Latin-American and the Caribbean Demographic Center from the UN-CELADE. Over one year (from March 2017 to August 2018), in-depth interviews with 50 participants (more than the 35 initially planned) were conducted. Table N.15 below presents the interviewees according to their role in the 2012 census.

<table>
<thead>
<tr>
<th>Type of interviewee</th>
<th>Num. Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>INE Directors and high officials</td>
<td>7</td>
</tr>
<tr>
<td>INE professionals</td>
<td>8</td>
</tr>
<tr>
<td>INE advisors</td>
<td>5</td>
</tr>
<tr>
<td>Census team members</td>
<td>6</td>
</tr>
<tr>
<td>Central government</td>
<td>6</td>
</tr>
<tr>
<td>Inquiry commissions members</td>
<td>6</td>
</tr>
<tr>
<td>Experts and scholars</td>
<td>8</td>
</tr>
<tr>
<td>Other organizations</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

Source: Own elaboration

In-depth interviews are particularly suitable for this type of study and advantageous for capturing elements of a complex topic. An in-depth interview “is a method of gathering information from a person in his or her own words by mirroring the back-and-forth, typically one-on-one structure of everyday conversation while keeping specific research questions and objectives in mind" (Guest et al., 2013, p. 163). This type of interview helps us comprehend
individual perspectives of a far-reaching event, deepen the understanding of a unique topic, generate descriptive data, gather the insight of the participant's thought process, and learn about the context (Rossman & Rallis, 2012).

The in-depth interviews conducted were semi-structured, that is, they possessed an initial structure of the topics to be explored, maximized the conversational sense of the interview, followed the interviewee's experiences and thoughts, and accounted for the nuances and topics not initially considered (Guest et al., 2013). For this, the interviews were conducted with the support of a specially designed guideline, which, rather than checking information, sought to trigger conversation and facilitate insight. These guidelines were designed based on the distinctions identified in the literature review, combining the lenses' key themes—policy, organizational and societal—and policy failure themes. Therefore, following the semi-structured character of the interviews, the guide was organized around broad themes, supported by open-ended questions, which were asked as the themes unfolded. Consequently, the number of open-ended questions or follow-up questions and the questions' sequence were different for each interviewee. The interviews guidelines are available in the Appendix N.1.

Selected interviewees had some involvement with the 2012 census or specific relevant expertise; all of them had a particular viewpoint that helped inform this research. For example, interviewees from the census team participated in the formulation and implementation process, the interviewees from the inquiry commissions were involved once the census controversy erupted; likewise, interviewees from the central government and other organizations were involved from their particular organizations at different moments. This means that each interviewee had a specific experience with the census case, from a certain
position, and at a particular point in time. In order to facilitate the conversation and the emergence of the interviewee’s own experiences, opinions, and meanings, there were different interview guidelines according to types of actors.

However, it is essential to mention that much of the interviewees’ involvement and opinions go beyond their specific roles at the 2012 census time. For example, a member of the national inquiry commission was also a member of an international organization, a former manager of the INE is an expert in demographic matters, or a census team professional in 2012 was in a different position in the 2017 census. Since the study focuses on understanding a complex phenomenon in a historical and institutional context, different perspectives are valuable for the analysis.

**Fieldwork**

The interviews were conducted through different strategies and using diverse formats. Given that most interviewees work in the government, universities, or international agencies, the standard way to contact them was by email or telephone. However, some of them were approached through professional networks, in this case, LinkedIn (widely used in Chile and Latin America). Once the fieldwork started, additional interview subjects were identified through snowball sampling.

The 2012 census case had significant media exposure and was also investigated by specialized commissions at various times in past decades. Several of the interviewees participated in instances of technical, political, or even judicial investigation. Due to the intense coverage of the census case and its judicial edges, some of the interviewees were initially reluctant about the interview, but after clarifying the academic focus and the conditions of confidentiality, they agreed to participate in the study. Once the interviewees
agreed to participate, they were willing to discuss their experiences and perceptions. Likewise, one element that increased enthusiasm to participate in the study was the new census in 2017, which revived the controversy of the failed census, encouraging different actors to reflect on this matter.

All interviews were performed in Spanish and lasted anywhere between 30 minutes to 2 hours and 40 minutes, with an average time of one hour and 23 minutes. As stated, the interviewees were eager to talk about the case and share their experiences and opinions. With two of the participants, the interview was conducted in two meetings. In one of those cases, the first interview was in 2015 and the other in 2017; in the other case, the two meetings were held one month apart during 2017.

Some people refused to participate in the study. Six individuals openly declined to take part, two unfortunately died, and seven others, despite different contacting efforts (emails, phone calls), could not be reached. Of those who rejected the interview, some had political responsibility for the failures that occurred or those for whom the census case had personal or emotional costs. On the other hand, there was an exception in a respondent residing abroad who did not agree to the interview in a semi-structured format but provided a written document to the set of questions by email. Although the quality of the information provided is different, for the records of the dissertation, this was considered an interview.

The interviews were conducted in two waves. Most of them were carried out during 2017—mainly focused on census professionals and the inquiry of the failure—and, after a first analysis of the information, the second wave of interviews was conducted in 2018—with the remaining interviews, experts, and stakeholders.
Regarding the place and format of the interviews, 21 took place in the interviewees' workplaces, 17 were held in cafeterias, four in the interviewee's houses, and seven interviews using Internet platforms (Skype or FaceTime). The last corresponds to interviewees who live in Chilean regions or abroad. Thus, and thanks to technology, all the interviews were conducted from Santiago de Chile. Additional information about the interviews performed is available in Appendix N.2.

The interviews were conducted with the support of the interview guideline—the list of themes and questions—but the logic of the interviews and the emphasis on topics depended on each participant and their experience with the census case. Also, notes were taken during the interviews, identifying the most critical elements of the conversation and distinguishing those issues that required additional inquiry or follow-up questions. The interviews, except for one, were taped and then transcribed for the later analysis. In the unrecorded one (by request of the interviewee), detailed notes were taken and later transcribed.

**Ethical Considerations**

Following the IRB and ethical considerations, informed consent and confidentiality agreement are vital elements to ensure voluntary participation in the study. However, considering the cultural context, and the minimal risk involved for the interviewees, this research did not require written documentation. Thus, the Institutional Review Board of the University of Massachusetts Boston approved the dissertation as exempt from continuing IRB review; the document is available in Appendix N.3.

The written consent, involving signature, is not a standard research practice in Chile yet. The research procedure is very similar to US protocol, but it does not require signing a
document, just a conversation. This comes from a cultural practice where the culture of "word" is more powerful than paper; so, in this context, asking for a signature could be considered "rude," "inappropriate," or even a sign of "distrust," especially considering that the participant already accepted the interview. Even though there are shifts ongoing in the country, and some universities are creating ethics committees and using written consent forms, this is a new practice. Therefore, and approved by the IRB at UMass Boston, this research used verbal consent. The conversation between the investigator and the interviewee ensured the understanding of the purpose of the interviews, described procedures for maintaining confidentiality and asked permission to record and transcribe the interviews (McLellan et al., 2003). All interviewees understood and accepted the conditions of confidentiality and the use of the information collected. In this context, one interviewee asked not to tape the interview and a few others asked to pause the recording at some moments during the interview. In general, once the interviewees understood the research's academic focus, they trusted in the research motives and were enthusiastic about taking part.

4.4. Methods of Analysis

Following the guidelines of a case study approach and according to the methods described above, this dissertation relied on qualitative research tools to analyze the information gathered, specifically through qualitative content analysis. This section describes the analysis performed through its different steps.
Qualitative Content Data Analysis

Qualitative content data analysis\(^3\) is: “a research method for subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh & Shannon, 2005, p. 1278). Qualitative content analysis “comprises descriptions of the manifest content, close to the text, as well as interpretations of the latent content, distant from the text but still close to the participants' lived experiences” (Graneheim et al., 2017, p. 30). Therefore, It is “a method for systematically describing the meaning of qualitative data” (Schreier, 2014, p.170), and also is characterized by three features: it reduces data, it is systematic, and it is flexible. These characteristics of the methods are described below.

The qualitative content analysis helps to reduce the amount of research material. By focusing only on those aspects linked to the study, this method allows the attainment of an adequate number of categories to answer the research questions (Schreier, 2014). This dissertation collected and reviewed abundant material (more than 700 documents and other secondary data, and 50 interviews) where some part of the information is not connected with the subject; therefore, this analysis allowed a focused approach to a diverse and large volume of material. In addition, content analysis is highly systematic. The method requires examining every single part of the material relevant to the research question, and thus counteracts the biases to look the material according to preconceptions or expectations. It is

\(^3\) It is important to not confuse the qualitative and interpretative content analysis method with the quantitative content analysis, which is closer to a quantitative text analysis. Due the predominant use of the latter, qualitative content analysis approach has not been well known as a method in its own in English-speaking countries until recently (Schreier, 2014).
also systematic because it requires a particular sequence of steps; although it is an iterative process, the steps remain the same (defining and identifying codes/categories, data coding, revising codes/categories) (Schreier, 2014).

Moreover, qualitative content analysis is flexible. It allows using inductive and deductive approaches or a combination of both for data analysis. Deductive methods start with predetermined themes and categories⁴ derived from prior theory, and inductive methods draw codes and themes directly from the data (Schreier, 2014; Cho & Lee, 2014). This combined approach has been called complementary or “abductive,” and requires moving back and forth between inductive and deductive analysis (Graneheim et al., 2017). Thus, derived from the literature review and Lenses Framework, the examination started from pre-established themes and initial codes (deductive) but then extracted new themes from the data (inductive), some of them as part of the previous categories, others in a complementary way. The flexibility of qualitative content analysis also means that the method is suitable to examine any communication material, including observations, open-ended survey questions, interviews, printed media, websites, blogs, among others (Cho & Lee, 2014; Schreier, 2014).

The abovementioned characteristics of qualitative content analysis, that is, to tackle abundant material with focus, to address systematically different types of sources of information, and to generate categories and themes through a combination of inductive and

⁴ While some qualitative methods literature distinguishes between categories and themes, others do not. For the purposes of this study, these will be equivalent concepts, i.e. the identification of things, opinions, perceptions, and meanings (Yin, 2014; Schreier, 2014; Graneheim, et al., 2017).
deductive analysis, is highly coherent with the case study approach (Staa & Evers, 2010; Yin, 2014).

**Stages of Data Analysis**

For this dissertation, the data analysis process required the following five stages: preparation of the material, identification of the main themes, coding and revision process, integration according to lenses, and multi-lens perspective. Diagram N.6 below presents the data analysis stages, and following, is the description of each one of them.

**Diagram N.6. Stages of Data Analysis**

- **First stage:** Preparation
- **Second stage:** Identification of main themes
- **Third stage:** Coding and revision
- **Fourth stage:** Integration according to lenses
- **Fifth stage:** Mult-lens perspective

**Source:** Own elaboration

**First stage: Preparation**

The first stage of data analysis, preparing the data, required organizing the files and documentation and making them available in digital format (pdf or docx) for further analysis. Regarding the in-depth interviews, over 70 hours of audio were thoroughly transcribed verbatim in their entirety by professional transcriptionists. Audio transcriptions were done in what Mayring (2014) calls "clean read or smooth verbatim transcript," that is word by word, which generated a coherent text reproducing the original wording and grammatical structure. Once the data were available in digital format, the analysis began with the support of the
qualitative software Atlas.ti 8.4.4 version for Mac (2019). This software has the advantage of allowing integrated analysis between different sources of information such as reports, news, and interviews, but it also allows differentiated analysis according to specified criteria (type of information, types of actors, stages of the policy, among others).

**Second Stage: Identification of the Milestones of the Case**

The main characteristic of a case study and critical endeavor is creating a detailed description of the case, including context, actors and chronology of events (Creswell, 2007; Yin, 2014). This stage involved identifying the most important moments and milestones of the case, establishing a timeline of events and actors to classify and organize it. Identifying the main events provided a first structure of the case narrative and facilitated the organization of themes within the case. Thus, the case is divided into four major moments or stages: **Census Strategy Change, Carrying out the 2012 Census, Census Controversy and Evaluations**, and **The 2017 Census and Future INE Challenges**. The narration of the case according to these moments is available in Chapter Five.

**Third Stage: Identification of Themes and Coding**

Following qualitative content analysis strategies, this dissertation combines an inductive and deductive approach for data analysis. Accordingly, the coding process did not start from scratch, but began from a set of initial themes (or categories) derived from the literature review and analytical framework. The themes were gradually specified and grouped into broader categories—what Stake (1995) called “categorical aggregation” or Yin (2014) denoted as the “iterative nature of explanation building.” Therefore, the identification, classification and interpretation of themes evolved in an interactive manner, which contained
initial codes and new themes or distinctions not initially considered. Diagram N.7 presents the sequence and logic of this coding process.

**Diagram N.7. Coding Process**

The first step of the coding process was the elaboration of the initial set of themes or categories. From the deductive approach, these themes come from the literature review, the *Lenses Framework* and the interview guidelines. This first list of themes led to coding and revision. Thus, the coding process allowed identifying major themes such as expectations about the census, the recruitment and training the census takers, INE leadership or organizational climate, among others. Following that, the inductive analysis identified new themes and codes that complemented or corrected the previous ones, such as the assignation of blame, perception of social media, leadership style, INE power struggles. Based on that improved set of codes, and supported by the qualitative software analysis Atlas.ti, the coding process continued.
As the analysis process evolved, the initial themes were less broad and became more precise and clearer. Echoing Weiss’ (1995) words, “The investigator’s preconceptions help to decide the initial organization of the material, but then the material forces modification of the investigator’s thinking, which then leads the investigator to revise the organization of materials, and so on for several iterations” (p. 169). Thus, the analysis of information sources was an inductive and deductive process, with a focus on a permanent revision of themes and codes, the relationship between them and the whole structure of themes. Appendix N.4 presents the themes and the overall coding organization, which was the basis for case narration and subsequent lenses analysis.

**Fourth Stage: Integrating Themes According to Each Analytical Lens**

The next stage was the analysis of themes and codes according to each lens of the framework. This stage led to identifying and connecting codes based on the themes from each one of the lenses (policy, organizational, societal). Thus, once set the three groups of themes—corresponding to the lenses—the analysis led to additional exploration and interpretation of the data to understand connections and underlying relationships between the categories within each one of the lenses. This process of analysis led to three separate examinations of the failure case—or different layers of the same case, or different cases within a case—each one of them with their own unit of analysis, foci, and particular perspective. Thus, these analyses work to effectively untangle the complex nature of the failures, observing the different points of view that each lens provides for the same case. Chapters Six, Seven and Eight present the most important findings from each one of these lenses.
As stated before, the interviews were conducted in Spanish and so was the analysis. Thus, there was no translation of the interviews into English after their transcription. Only later relevant selected excerpts were translated into English to exemplify the themes and place in the report the voice of the actors, with their nuances and feelings. There was an additional challenge in the translation process. To ensure the original meaning of the sentences was adequately captured, the translation from Spanish to English came with a proper linguistic external check.5

Fifth Stage: Multi-lens Perspective

The final stage of the data analysis refers to the use of the multi-lens perspective to understand policy failure in the case. The analysis arises from the previous stage's findings, where each lens provided a particular perspective, and then, an integrated analysis of lenses to identify common or connected themes among the separate perspectives, allowing for a more integrated analysis. Examples of these additional type of observations are: the way the political context may have triggered decisions about the census, how the INE's recent history might influence the enumeration, how census conflicts and performance affected the organization, or the extent to which collaboration with other organizations, or lack thereof, affected policy decisions. The most important findings from a multi-lens perspective are available in Chapter Nine.

5 Reviewed by the professional copyeditor Kurt Hoberg. He is MFA in creative writing at the University of South Carolina-Columbia, he is fluent in Spanish, and he also lived in Santiago de Chile.
4.5. **Validity**

In this study, the validity of the study is part of the overall, interactive research process. It is not an additional stage or requirement to comply with, but a primary concern throughout all dissertation phases. The concept of validity has been, and still is, controversial in the qualitative research field. The strong epistemological connotation of the word "validity" comes from a positivist perspective regarding the "real world," and the role of knowledge, and while some qualitative researchers abandoned this concept entirely, others have intended to redefine it. Beyond discussions, validity refers to those procedures of the qualitative research that safeguard the quality of the study (Maxwell, 2012). More concretely, they are validation procedures or called “validity tests.” Following are the relevant validity considerations for this dissertation.

One form to contribute to the validity of qualitative research is through “multivocality," or the use of different "voices" or perspectives about the case (Creswell & Miller, 2000). This study included in-depth interviews with actors connected to the 2012 census, possessing different roles, acting in separate phases of the policy (some in the formulation, others in the implementation, or from organizations linked to the case). Also, the interviewees had different levels of power and influence (positions of authority, technical expertise), diverse political views (political parties, voting preferences, beliefs), distinct levels of responsibility within organizations (directors, advisors, high officials, professionals), and positions from within different agencies (academia, international organizations, government agencies). Also, regardless of their roles, the interviewees held different views on the idea of failure of the 2012 census and how it could, or finally could not, be solved.
Another mechanism for validity is "triangulation," understood as using multiple and unique sources of information, methods, and perspectives to corroborate evidence (Creswell, 2007; Yin, 2014). Thus, triangulation is linked to two distinct key purposes of case studies: the construction of valid interpretations by the convergence of evidence, and the achievement of a deeper insight by combining methods, data, and analysis techniques (Staa & Evers, 2010). According to Staa and Evers (2010) there are six triangulation types, and except for one (triangulation by more than one researcher), the remaining five were intensely used in this dissertation. They are: 1) Data source triangulation: to use different strategies to collect data—interviewing and gathering secondary data—from different moments, ranging from 2010 to 2019, and with a variety of persons—the 50 interviewees and other secondary sources of individual testimonies. 2) Theory triangulation: to rely on more than one theoretical perspective to gather and interpret data, in this dissertation through the Lenses Framework. 3) Data type triangulation: the use of diverse types of data, such as interviews transcripts, news, blogs, reports, assessments, and others. 4) Methodological triangulation: the use of more than one method to gather data—interviews and diverse types of secondary data. 5) Analysis triangulation: the use of separate data analysis or multiple units or levels of analysis, in this case, the policy, organizational, societal, and multi-lens.

Multiple triangulations confirm the breadth and accuracy of data and their interpretation, in line with what Yin calls "convergent validity" (2014). However, it is essential to note that triangulation does not necessarily lead to confirmation; it is not about validity in seeking objective truth, but about improving the understanding of a phenomenon. Indeed, data and methods triangulation does not necessarily lead to having "a unique version" of the 2012 census policy failure; on the contrary, it exposes the different interpretations and
points of view. Therefore, "Triangulation is thus seen as a means of enhancing the completeness of the findings, rendering a more in-depth understanding" (Staa & Evers, 2010, p. 752).

A thick or dense case description is fundamental to the case study approach and another way to contribute to the research validity. The thoroughness in collecting information and incorporating varied perspectives and sources of information provided a deep comprehension of the census case. This is how Denzin refers to the power of thick description, “it inserts history into experience. It establishes the significance of an experience or sequence of events for the person or persons in question. In thick description the voices, feelings, actions, and meanings of interacting individuals are heard, made visible” (2001, p. 102). Through a rich description (available in Chapter Five), the case enables the readers to form their interpretation, conclusions, and even transfer information from the case to other settings (Maxwell, 2012; Yin, 2014). That is precisely a significant role of case studies, to provide a narrative that engages and challenges readers to interrogate the facts and circumstances, to identify keys to analysis and thus, little by little, to deploy a better understanding of the specific case—the 2012 census in Chile—and the phenomenon under study, policy failure. The study gathered a considerable amount of relevant information including reports, media, INE documentation, and especially the in-depth interviews; all of this accreted to become the rich and dense description of the case, which is the cornerstone of this dissertation. The production of rich data was facilitated by a long-term involvement with the case—which is another way to check validity—helping to check and confirm the observations (Maxwell, 2012).
Complementing the above, another mechanism to combat validity threats is "peer review or debriefing" (Creswell, 2007; Creswell & Miller, 2000). This process consists of sharing write-ups to check accuracy and interpretation with peers and colleagues. The debriefed peer plays "devil's advocate," challenging the researcher, asking hard questions about meaning, methods, and interpretations (Creswell, 2007). This dissertation relied on the valuable support of colleagues from government positions and academia. This mechanism was essential to clarify concerns, and particularly significant to the analysis from different lenses.

Reaffirming what was stated earlier, this dissertation did not consider validity checks as another step of the methods but as a permanent and pervasive concern for the quality of the investigation. Therefore, credibility, legitimacy, and the research's worth require more than the above validity tests. They are born of a disciplined re-considering throughout the research process, which was a permanent and challenging process for this dissertation.

4.6. Limitations

One of the challenges of this dissertation was timing: the census was carried out in 2012, the presentation of the data and most of the controversy happened from 2013 onwards, and most of the in-depth interviews were performed years later, in 2017, when a new version of the census was carried out. Thus, the question about how to handle timing was a permanent concern of the dissertation.

The timeframe to analyze a topic has been a constant preoccupation in the policy failure literature, because time shapes perceptions and even can change the assessment of failure. This research assumes that the 2012 census failure in Chile is a social construction
that occurs over time, and this temporal tension is part of what is under study. In this way, the dissertation assumes that having information from different moments of time is not a limitation, but a characteristic of qualitative research (Creswell, 2016). The subsequent analysis showed that having information about the case over time actually allowed building a rich and dense description of the 2012 census case.

To generate a consistent account of the case, these temporary tensions were faced in different ways: using various sources of information (media analysis, reports, INE internal documentation, in-depth interviews), data triangulation, and the search for discrepant evidence. For example, since the interviews were conducted years after the 2012 census, the interviewees' accounts were not necessarily accurate about the dates or sequence on which some events occurred; therefore, the analysis of the news of the time, and document review, allowed to check these inconsistencies.

The interviews conducted in 2017 and 2018 cannot be separated from the events of the new census. In other words, the events of 2012 were interpreted from this new moment of time. The use of pre-2017 sources of information helped to identify the interpretations and meanings from that time. However, conducting the interviews in 2017-2018 turned out to be a facilitator and an asset in conducting the interviews. Due to the 2017 census, the controversy about the failure of the 2012 version was more present than ever. Likewise, most of the legal conflicts and investigations the case had already finished, so the census's legal or criminal threat was not an obstacle as initially thought.

There were also limitations concerning the fieldwork. Some key actors in the census case refused the interview or did not respond to efforts to contact them. To address this weakness, the study relied upon other sources of information (documents, media interviews,
hearings) and also other interviews allowed to explore those missing perspectives. Besides, given the limitations of time and resources, and in conjunction with the country’s centralized nature, most of the interviewees were from Santiago. Therefore, this study does not adequately incorporate the perspectives of regional or local actors.

Finally, the multiform nature of policy failure itself led to the confrontation of biases and differing perspectives from the interviewees. The census was labeled by several actors and the citizenship as a failure, with public opinion, the media, and several technical and political reports later confirming the defectiveness of the data gathered, including the census being declared “illegal” by the Comptroller agency (CGR, 2015b). The whole process of the census seems inextricable from "failure," which implies that actors’ perspectives are shaped by this context. That is why validity mechanisms are so important in qualitative research, as they allow addressing these complexities and weighing them up properly. From here, a dense description of the case is especially critical, as it will help stifle biases and allow for a careful analysis of the case.

4.7. Researcher’s position

In addition to the validity mechanisms and strategies mentioned above, another critical element for the quality of a study is the researcher’s position. In quantitative studies, the researcher tries to be neutral and impartial, abandoning his or her values and beliefs, and using rigorous and "objective" methods to avoid biases that could affect the research. However, qualitative research is different; researchers’ beliefs and values are part of the inquiry process, and this study is no exception.
There are two broad concerns regarding the researcher's role in qualitative studies, the researcher's subjectivity–known as bias–and the researcher's influence on the setting of individuals studied–known as reactivity (Maxwell, 2012). However, more than fighting against our influence or controlling our personal characteristics or biases, qualitative research proposes "reflexivity" as a permanent attitude throughout the research process. Maxwell states, "It is impossible to deal with these issues by eliminating the researcher's theories, beliefs, and perceptual lens. Instead, qualitative research is concerned with understanding how a particular researcher's values and expectations influenced the conduct and conclusions of the study" (2012, p. 124). Researchers are part of the social world we are studying, and therefore we cannot avoid who we are, the way we approach the phenomenon it or the influence we exert. But we can be aware of our role in the study and to think and ponder the different limitations that may exist, and thus be able to deal with adverse effects in a better way. Below I share some reflections on my role as a researcher in studying the failure of the 2012 census in Chile.

The whole process of investigation is permeated by who I am. I am a Chilean, middle-aged woman, an academic, a public policy advisor and consultant. I am also a sociologist and a master in management and public policy from the two most prestigious universities in my country, Universidad Católica, and Universidad de Chile. This background speaks to my capabilities, relationship with the academic world, professional setting and networks.

I have been working in the public policy area throughout my professional career–studies, consultancy, evaluations– but I am not a policymaker, and I have never worked in the public sector. While I try to build a bridge between academic knowledge and decision
making, this is academic research, and particularly a doctoral dissertation. Therefore, I am in a paradox. I am an academic, this is my doctoral dissertation, but I am critical of what we often do in academia. And thus, by studying the policy failure phenomenon, I attempt to explore—academically—, ways to better connect with decision making.

Another important element is my political leanings. The 2012 census, and its failure, had powerful political overtones, and it occurred during the administration of right-wing President Sebastián Piñera. Like any human being, I am not neutral; I have experiences and opinions on the events in my country, and its effects. Besides, although I am not a member of any political party, I identify with what in my country is a center-left position.

Some of these and other elements could work as facilitators, but also as limitations. For example, my training as a sociologist helped investigate complex statistical and demographic issues about the census, but perhaps for some interviewees, this same background was perceived differently. Similarly, most interviewees have graduate studies, so there were open to this type of research, however other interviewees this academic tone could be a limitation or even the reason to reject the interview.

Thus, qualitative research is full of challenges, and our role as researchers is not external but is very present in every step and decision of the research process. In order to contribute to the quality of the study, it is essential to cultivate reflexivity, that is, maintain a thoughtful attitude about who we are, our ideas and preferences, and how we might be influencing the research. In Stake's words, "All researchers have biases, all people have biases, all reports have biases, and most researchers work hard to recognize and constrain hurtful biases" (Stake, 2010, p. 174).
CHAPTER 5
THE 2012 CENSUS IN CHILE: A CASE OF POLICY FAILURE

Every ten years, the National Institute of Statistics (Instituto Nacional de Estadísticas, INE), the organization responsible for implementing the census in Chile, is tasked with the logistically complicated but clear mandate: count and characterize all the people who live in the territory of Chile. Unlike what happened in previous decades with the censuses, and contrary to the reputation of the country's statistics, the 2012 census was considered a failure.

Based on different sources of information—including interviews, news, and reports—this chapter narrates the 2012 census case, emphasizing the elements that led to failure. Throughout a detailed and dense description of the events, actors, and circumstances, the narrative presents the complexity of the policy case, becoming the starting point for a more in-depth exploration carried out in the following chapters.

The narrative of the case is organized in four stages. The first is Census Strategy Change, which presents the context, reasons and characteristics of the methodological change of the 2012 census. The second stage, Carrying Out the 2012 Census, is about the implementation, identifying the difficulties and dynamics during the long enumeration process. The third stage, Census Controversy and Evaluations, focuses on the polemic over the quality of the data grabbed, the different evaluations performed in an atmosphere of growing political conflict and technical controversy. The final stage, The 2017 Census and
INE Future Challenges, describes the circumstances that led to a new census in 2017, its characteristics and the modernization challenges the INE is still facing.

5.1. First Stage: Census Strategy Change

This first stage of the case focuses on the change of methodology to carry out the 2012 census enumeration. This section presents the context in which the census takes place in Chile, its symbolic value, and the role of the INE in the country's statistics. Then, it describes the circumstances under which INE authorities decided to change the census methodology, the characteristics of the decision, and the reactions of different actors.

The INE and the Census

Historically the census has been a significant milestone for the country (Pinto, 2015). Until the 2012, the census day was always a holiday, and all Chileans stayed at home waiting for the "censista" or census taker. In a long, narrow and geographically diverse country, with so many separated areas, the census has successfully reached the most remote places. The spirit of census day is conveyed by stories of those who waited for the census taker, offered them a tea, talked, met, or simply showed off the census sticker on the door that demonstrated their house was already registered. As one interviewee put it, "It was almost an honor to participate in the census, be registered and wear the sticker as registered."

The census represents a democratic tradition: no matter if you are rich or poor, if you live in the city or the country, the State will seek ways to reach you, to know about you. In the words of one of the interviewees, “The census has a particularity, it is the only time where the State ‘in person’ knocks on your door and asks you who you are. I want to know about you, your house, your flat.” In this way, for Chileans, the census was much more than a
population count; it was a symbolic instance of citizen encounter, an expression of the Republican idea—alluding to a sense of nationhood and pride in the form of government that comes from the will of the people. As one of the interviewees explained:

It is like when you have the option to vote that day and that we are all equal. It does not matter your income level; it does not matter who you are, it does not matter your color, your vote and my vote worth exactly the same. That is the census, civic education, and Republican culture!

Founded in 1843, the National Institute of Statistics (INE) is part of the ministry of economy. Today the institute is responsible for more than 70 statistical projects of different kinds, such as the Consumer Price Index, the National Employment Survey, social, environmental and productive surveys, and large logistics operations such as the population and housing census and the agricultural census (INE, 2020).

The United Nations recommends censuses every 10 years (UN, 2017), and so does the Chilean law (Ley N.17,374, 1970). Given that the previous census was in 2002, the following would be, and was, in 2012. According to the interviewees, for the INE, the census is its most important task: the symbolic value, the logistical complexity of the enumeration process and the importance of the data collected through the census for other statistical products, and its preparation takes several years. By tradition, preparation for each census begins on the same day that the previous census ends, representing ten years of preparation.

6 The UN’ presence is significant in Latin America. For demographics and censuses matters, the UN agency is the Latin American Demographic Center CELADE (Centro Latinoamericano de Demografía), dependent on the Economic Commission for Latin America and the Caribbean (Comisión Económica para América Latina y el Caribe, CEPAL) whose regional headquarters are located in Santiago de Chile. Interviewees refer indistinctly to these agencies, and for this study, CELADE, CEPAL, and UN are equivalent nomenclatures of the UN.
As an interviewee pointed out: "The census is always the most complex operation in times of peace. That’s the way it is, the preparation, the amount of resources, the mobilization of the people is quite large."

In general, Chilean censuses achieved low omission rates, 2.1% and 3.1% in the 1990 and 2000 census rounds, figures below the regional average of 7.0% and 5.1%, respectively (Mendez & Sacco, 2016). Also, interviewees recall good participation and citizen commitment on Chilean censuses. Thus, even in the 1980s, during a dictatorship and deep economic crisis, the census was carried out without political pressure and with high technical standards. For the interviewees, the census is a task of the State, not of the governments in power; it is a collective effort that should go beyond the partisan interests of the moment. Consequently, the census was the clear expression of a meticulous and serious statistical institution, a source of pride for all Chileans, and a recognized model for other surrounding countries.

However, this story changed abruptly in 2012. With the slogan "more modern, safe and professional" (Piñera, 2012), the census had a different enumeration strategy. Instead of the traditional "de facto" census—a single day for the whole country, applied by trained volunteers, and considering the residence as where the person slept—the new authorities of the INE decided to run the census under the strategy, "the right to be censed" or "de jure," which enumerates people considering their usual place of residence through the work of

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These figures are based on an indirect assessment comparing censuses figures with UN population projections. More information regarding the omission rate in Latin America is available in Appendix N.7.
employed, i.e. paid, specifically trained, professional interviewers, in a three-month period of application.

**From de facto Toward a de Jure Census**

Both the literature and experts’ opinions agree about the multiple benefits of migrating toward the de jure census methodology. This shift has been a trend throughout Latin America, where in the 2010 decade only five out 20 countries in the region continue performing a de facto census (CEPAL, 2014). The most important advantages of this type of census are the concept, quality data, reduced risk and lower costs. Regarding the concept of usual residency, instead of asking, "Where did you sleep last night?" the de jure census asks, "Where do you usually live?" which recognizes the idea of citizen's rights related to the place that they live, more than the random circumstances or sleeping there the night before (CEPAL, 2014; Villacis, 2017b). Thus, this criterion better reflects the number of people who inhabit a territory, since it considers who would be the real demanders of goods, services, and public policies (Chackiel, 2009).

Another advantage is the better quality of the data collected. The old strategy is run by volunteers, usually students, and public servants. INE and experts interviewed recall that recruiting enough volunteers for the enumeration was becoming increasingly difficult for the statistical organizations of the world; meanwhile, a de jure census hires professional pollsters, who should receive better training and supervision, which also contributes to obtaining a better quality of information (DANE, 2014; Villacis, 2017b).

The de jure census allows for a more controlled planning and monitoring process than the de facto approach, promoting the identification and correction of errors in the enumeration process (CEPAL, 2011). By having more time, this methodology allows to
better face any kind of problems. To census a whole country in a single day could be hazardous. Several problems may arise that may jeopardize the census operation, particularly in Chile, which often suffers natural disasters such as floods or earthquakes. Experts interviewed agreed that the de jure census operates over an extended period and, with that, decreases the risks, and, if problems occur, there is enough time to face them.

Thus, the operational and logistical advantages of a de jure census stand are strong (CEPAL, 2014), and different interviewees, experts, managers, and professionals agreed that Chile should move toward a new census strategy, but that that transition should not happen for the 2012 but the 2022 census. As stated by one of the high officials of the INE, "Chile was transitioning toward a de jure census. This had been discussed within previous census teams at the INE, and they decided that Chile was not yet prepared to move to a de jure census at that time." Therefore, the INE had been preparing the census according to the old strategy, with all of the instruments, methods, and logistics designed for a de facto type of census. Moreover, at the moment of the decision (September 2011), the pre-census, one of the most critical preparation stages—it allows for updating the sampling frame, and organizing the logistics for the census day—was already in process (the pre-census took place between March and October 2011) (INE, 2014a).

The government announced the new census via TV, radio, and newspapers as a significant and highly positive change. The Minister of Economy proudly stated: "This is a breakthrough in public policy. This change will allow us to have a better tool, which will benefit every town in Chile, and all inhabitants of the country" (La Tercera, 2011). Besides, the government stressed another argument in favor of the new census: it is cheaper and will save significant resources. In the old census method, by decreeing a holiday on the census
day, the country suffered economic losses of around US$200 million. Thus, authorities argued that the extra cost of this census (hiring pollsters) was significantly lower than what the country would lose for the holiday (7% of that amount); therefore, the new modality was more efficient (La Tercera, 2011). Hence, the idea of a more professional and efficient census fit in with a government that had declared itself of "excellence."

**The Decision to Change**

The decision to change the census methodology was made by a small group of the highest INE authorities (Director Francisco Labbé and his closest advisors) and promptly approved by the National Census Commission, without consideration of technical criteria or participation of the INE specialists or high officials, who were merely informed about the change. Interviews conducted revealed that INE managers felt overlooked in this decision-making process; this was the first instance of conflict between the new director and INE officials. The interviewees recounted how surprising the decision was, and how shocking and even offensive it was to be informed of a significant methodology change. An INE interviewee describes:

> And the truth is they just apprised us; they informed us about the decision, that is to say: this is changed, it is a decision taken and it is taken. When they notified us about this, they told us: it is a decision made by the President of the Republic.

The INE did not have previous experience in this type of census or any other logistic operation of a similar scale. The census was scheduled to take place in April 2012, and the change in the implementation approach was officially made in September 2011 (INE, 2011b, 2011a), so, indeed, INE interviewees declared there was not enough time to undertake pilots and run the proper pre-tests (thus leading to adaptations of the process, the questionnaires’ and the organization) for the new method. Moreover, this inadequate preparation ignored the
abundant recommendations regarding the necessary safeguards over a change of census strategy (UN, 2008; Chackiel, 2009; CEPAL, 2011b). Regarding testing, the UN states: [testing is] essential for countries without a long history of census and for those in which fundamental changes in census methods are being considered. [...] Such tests can give important information on the adequacy of the field organization, the training programme, extent of respondent burden, the processing plan and other important aspects of the census (UN, 2008, pp. 45–46).

The methodology changes not only meant that the census was carried out in more than one day but also implied a change in the overall census strategy: planning, use of cartography, monitoring systems, among many others. According to the UN, “Planning can be regarded as the core of the census phases and the processes, it is most critical to the completion of a successful census” (UN, 2016, p. 9). However, this census was not planned adequately. The INE, specifically the census team in charge of this task, had only a few months to change the entire census policy. For all professionals within the INE, the decision to change the strategy was overwhelming. In the following excerpt, a professional of the census team points out how significant the change was:

We were still working like stupid for the traditional [de facto] census, considering how we allied with the ministry of education, how to recruit volunteers, how to train the students, that is, we had thousands of ideas of how to do it better. And suddenly, 180 degrees to the other side! Not just 25 degrees, but 180 degrees!

Although the recommendations aimed to change the mode of the census for the next decade, the interviews revealed the real reason for the change in census methodology at that time, although not publicly recognized, which was the eruption of a social movement unprecedented in the history of Chile. In 2011, college and high school students all over the country were mobilized for a "free education, of good quality, and for all," accusing the
Sebastián Piñera was the first right-wing president after 20 years of government control by the center-left coalition and, therefore, represented a set of market-oriented policies, developed during the dictatorship (1973-1990), and was under intense criticism. Piñera was a focus of the social movement’s attack, and the information collected revealed his government feared that political opposition might result in a lack of volunteers to perform the census or even a boycott of the census. An interviewee refers to the political basis of the decision:

The reason was entirely political, and had a cause: the youngsters were super mobilized at that moment, and there was fear by the rightwing government of the mobilized youngsters. Fear of bot being able to recruit them, train them, or that they might use the census as a mechanism of force.

The student movement was, then, the main argument for the change of the census strategy. Another interviewee, an INE Director's advisor, describes how they built the case to change the census strategy:

It was the winter of 2011; the students' crisis begins, students marching on the street every week. The base, the 75% of the census takers, should be students, therefore: panic! We came to that meeting on a Saturday and said: look, we are facing this situation, what do we do? What do we do? Let's do it, let's change the methodology; the decision was political, but it had to be presented as a technical argument.

To recruit 500,000 volunteers was already a difficult task for the traditional census team (who were developing strategies to ensure the number of census takers), and the social movement was a real risk to the census’s success. However, this threat was not made explicit as one of the reasons for the methodological change. Most interviewees, especially those who
understood the complexities of censuses, quickly realized that the protesters were the actual reason for the change, and that reason was considered legitimate. Thus, the paradox occurred: everyone knew the main reason, but it was "the elephant in the room." An INE interviewee refers to the situation:

Then Mr. Labbé said: well, you know, we are planning the census and we have some problems, that we won’t get enough census takers, and therefore we have decided to change the census type. He never spoke about the issue with the students at that time, he did not mention it, but you knew the particular problem that was behind it [the student movement], the problem was there!

There are different views about hiding the real reason. While some strongly criticized the lack of transparency that affected the technical foundations of the decision, others understood or even endorsed the idea of not exposing the cause, given the hectic political scenario. Most actors understood the seriousness of the situation due to the strength of the social movement—that had paralyzed the country—and the uncertainty about how or when the social protests would resolve. Below, an interviewee describes the power of the social protests:

The census was going to be in April of the following year, and suddenly they [INE] said, no, they were going to change it. Then, of course, it was a tremendous shock, it was incredible, but you didn’t need to look at the newspapers anymore [to understand why]. That was it! That year high school students and college students were on strike for six months!

However, more than to the methodology change, the significant criticism and confrontations were about maintaining the initial date of the census in April 2012. Most of the interviewees understood that due to the political circumstances, the census should be de jure, but with proper preparation, and for that, the INE needed at least one more year. Thus, there were several requests to modify census date, both from within the INE, experts, and
from other organizations, but without success. The chief officer of the Latin American and Caribbean Demographic Center, CELADE, pointed out at that time: “When we, as CELADE, were informed that a census of de jure would be made, we thought that they were going to postpone the census, but they said no” (CIPER, 2014a).

Moreover, the internal INE committee that analyzed the implications of moving to a new census was emphatic in recommending a postponement, as one of the INE analysts declared, "one of our main recommendations was to postpone it" since they needed time to build a new strategy, make pilots of the questionnaire, etc. Likewise, the following words of a UN expert describe one of the failed attempts to warn the director about the change of date of the census given the complexity of the task:

Labbé finished making his comments about the decision he had already made but did not say anything about the date. So, I asked him, are you going to keep the same date? And he said: Of course, of course, the INE is very strong. Then I said: I don’t think you can have everything ready for the change, it’s very difficult! He told me: No. And the conversation ended. It was not a consultation, it was nothing, the conversation ended there.

The de facto and the de jure census have significant differences in content, logistics, and operations (CEPAL, 2011b; Chackiel, 2009), however even after census problems arise, the INE Director insisted that there be no objections to the changes in methodology: "It was demonstrated at the time that it was not necessary to conduct a pilot census because most of the activities that were checked were already safeguarded, in particular, training, logistics, testing of the questionnaire and the control system" (Cámara Noticias, 2013a).

Most of the technical arguments indicated the census should have been postponed, and that such a decision had been made at other times in history (INE, 1982; Pinto, 2015), so the question is: why was it not? Based on the information collected for this study, there are at
least three explanations that conspired to prevent postponement. First, the personal characteristics of the new INE Director, Francisco Labbé, who comes from academia: he is a civil engineer, with a Master’s in economy (Chicago), and was Dean of the faculty of economy and business at a private university (UNAB, 2010). Different interviewees agreed Labbé lacked experience in public management, statistics, or public policy, and also that he believed that the census was a much simpler task than in reality. Second, the eruption of the social moment into Sebastián Piñera’s first government—in office for only a year and a half—that did not want to provide public recognition of student protests for fear of acknowledging political weakness. Finally, there was the matter of the INE managers who, faced with a new rightist government, a new director, and authoritarian decisions—that resembled dictatorship—did not dare to express their technical arguments more strongly out of fear of dismissal.

Later, the chamber of deputies (2014), after running an investigation about the decision-making process, referred in harsh terms to the lack of technical rigor:

The decision [census strategy change], was adopted by people who did not have the technical qualification, nor had any type of technical input prepared by the technical teams of the INE; therefore, it was not quantified, nor was the decision of the methodology change and its consequences in the process of the census pondered (Cámara Noticias, 2014 p.2).

Thus, in the context of the tensions inherent to a new government and new authorities, the INE treated the decision on the 2012 census, made at the highest administrative levels and without consultation with experts, as a fait accompli. This attitude of "moving forward" was even more evident in the more distant regions of the country, given the high centralism of the Chilean public administration, regional administrations tend to abide by decisions
coming from the central level. The following quote shows the thought of a regional director interviewed concerning the strategy change, where despite the lack of piloting and preparation, he had to move forward:

I have to forget that I think it won’t work because if I do not manage it myself, nothing happens. I have to convince myself of, well, this doubt. There are people in Santiago who think it is possible, I will trust them, we will change the questionnaire, it does not matter that we have not piloted it, I mean, these are intelligent people. And that is the argument that I built, and under that argument, I say: I guess we are doing this, then, and we are going to focus on finding the people we have to hire, we are going to train them, and that’s it, here we go.

International standards emphasize the importance of planning each step of the census: “Without such a programme, the census data when finally produced may contain many errors which can severely diminish the usefulness of the results. If data are of poor quality, decisions based on these data can lead to costly mistakes. Eventually the credibility of the entire census may be called into question” (UN, 2008, p.32). However, the 2012 census didn't have the proper planning process and therefore, few months before the enumeration, the census team initiated the task of modifying instruments, creating monitoring systems, and designing recruitment plans and new strategies for training. Those interviewees who were involved, remember how difficult it was to adopt those challenges in such little time.

Running a census is a complex task that requires the coordination of various processes at the same time, and making sure it is consistent, leading one interviewee to recount dumbfounded: “We had to set up a whole machine to hire, recruit, train, assemble, get places, and put together all the logistics involved from scratch, in three months! And with little money!” And the following quote from an INE professional illuminates the coordination challenges and complexity of a census:
The census project is that brutal, and big. It’s like, I think… actually those who do not know censuses or have not participated in any census, do not really understand that you are talking about a giant dragon with 25 heads … and every head impacts the others.

The INE faced one more challenge: unreasonably high expectations. In line with the idea of a government of excellence that installs a "new way of governing," and "we will govern with the best" (Piñera, 2009), President Piñera tweeted: “2012 census will be the most modern, safe and professional” (Piñera, 2012), and then declared: “this is going to be the best census in the history of Chile," (La Tercera, 2013a) raising expectations and putting the census at the center of political attention and the media. For many, those simple words ended up politicizing the census. From that moment on, the census ceased to be the country's effort, or an INE task, and became the “Piñera census.” It was a new political scenario, in the words of government authority, “I think when Piñera said ‘the best census ever,’ they all [media, political opposition] said the same thing, how best to obliterate this census? Then, it was politically a cake [all too tempting].” Similarly, another interviewee comments on how Piñera’s words broke a statistical tradition, “the best census ever … historically a government prepares the census and the next government runs it; one prepares it, the next one runs, and no one was ever saying such terrible things. That was a milestone political provocation.”

5.2. Second Stage: Carrying out the 2012 Census

This second stage of the case focuses on the implementation process of the 2012 census, its characteristics and tensions. The section describes and analyzes the INE’s numerous arrangements made to carry out the census under the new strategy and the several complications faced given the short preparation time and lack of resources. It also delves into
the operational and technical difficulties that occurred during the long census process, as well as the conflicts within the INE, given the complications of achieving the proposed goals.

**Preparing the Census**

Despite the initial resistance in public opinion and among actors, the census was carried out in 2012 under the new methodology. Given the scarcity of time to prepare, the operating structure was not much different than previous de facto enumerations regarding the organization, employing a top-down hierarchical approach, and going from the national level down to the local. Thus, there was a national committee to coordinate and supervise all census operations and regional, provincial, and communal offices. The INE was responsible for census functions at the national and regional level, but at the commune and local level, a census manager and a supervisor were responsible for the coordination and enumeration operation (INE, 2014a).

Along the way, the implementation of this new census experienced several difficulties, the first of which was a lack of resources. The new census methodology required an additional 6,500 million pesos (approximately US$11 million by 2018), negotiated by the National Congress. However, INE managers, especially in the operations area, realized that those additional resources were insufficient and poorly calculated, and they informed the INE Director and head of census. However, INE authorities refused to request more funds from the ministry of finance, which in practice meant that the entire census operation began with a budget deficit of 2,800 million (approximately US$4.7 million by 2018). One interviewee

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8 The law that regulates the public budget is discussed and approved in the National Congress in November of every year for each of the State’s ministries and agencies (with programmatic details).
commented on why the INE authorities did not request the missing resources: “there was no money because they did not dare to ask for more financial resources.” Likewise, another interviewee recalled that the authorities did not want to admit that they were wrong in calculating the necessary resources:

And the reaction at that moment was: ‘we already told the Minister the amount of money needed; do you want us to acknowledge with Minister Longueira that we made a mistake?’ [Ironic tone] And I looked at them and said: Obviously! Obviously! And they said, ‘No! You have to fix it with whatever we have.’

The evidence collected showed that one of the more challenging tasks for implementing of the census was the recruitment of census takers. The new approach required hiring a massive number of people, in a short period, and all of this given the highly demanding quality and transparency requirements of the public sector in Chile. One INE interviewee explains the difficulty of the task: “just imagine what it is to hire 15,000. There is nobody in the country that hires 15,000 people in a month. Not even mining projects are capable of doing it.”

INE authorities, aligned with the idea of a “professional” census, decided to outsource the recruitment and selection of the census takers to a private company, and the respected firm Trabajando.com (laborum.com) took over. The government opened the application to fill the 14,000 positions (censistas, local managers, and supervisors) with simple initial requirements: be over 18 years old, Chilean (or permanent resident), and have completed secondary education (Emol, 2012a).

The census team, headed by Eduardo Carrasco, estimated 14,000 enumerators needed, but this number was the subject of controversy from the beginning by other INE officials. Various interviewees recalled technical discussions with the director and the head of census
on the number of census takers, considered insufficient, which was a risk for the census operation. An INE official pointed out how they tried to warn the director about the shortage of census takers; however, he took these warnings as political challenges: "We kept saying ‘but,’ and we told him that the people calculated were too few to conduct the census. But Labbé believed we were boycotting the census. Still, we warned him!"

Among other things, pilot tests make it possible to evaluate the duration of the survey, the workload, and the profile of the census takers (CEPAL, 2011a, p. 32). There was no time to carry out the necessary operational and content tests as recommended, so the criteria for estimating and making decisions did not have a technical foundation, which generated several discussions within the INE. Another interviewee explained how, based on experience in other operations and surveys of the institute, INE officials realized the number of censistas was low and tried to alert authorities:

You calculate, first. I have questionnaire tests. How long is the questionnaire on average? How long in rural areas? How much then is the burden that a regular person can carry, in a day? And with that we should calculate. And we, even without having the experience of census de jure, we said: this is not enough people. And this number [initial 14,000] demonstrated later to be even less [than we had thought], because we had no experience in this census.

However, these warnings were not considered at the time, and later reports confirmed the shortage of census takers (Bravo et al., 2013; CGR, 2015b).

The salary of the census takers was also a much-discussed subject within the INE. Some interviewees recount that the initially calculated wages were much lower than those paid to the enumerators in other INE projects (around 30% lower), but after intense negotiations, authorities agreed on a salary of 300,000 pesos (equivalent to US$530 as of 2018) per month for 40 hours a week. INE interviewees agreed that the wages were low for
pollsters, and with this in mind, the risk that employees would leave census work for a better job offer was higher. The amount of money offered also caused intense reactions in social media, for example, this expression on Twitter, "A vulgar scam, work on the 2012 census. Get out of here with your exploiter census thing!" (Aspe, 2012). However, from the government, other arguments were occurring on wages. In the first place, this was the first census that paid, and paid for a three-month work period; secondly, authorities argued that hiring census workers would be a boon to the economy (La Tercera, 2011).

The government considered the application process successful; more than 310,000 people applied (mostly women) for around 14,000 jobs for all the communes all over the country (Labbé, 2013b). According to the interviewees, the high number of applicants was due, because they thought that the census was a one-day job, as was the case in previous versions (Bravo et al., 2013). Although the Laborum company carried out the recruitment process through the web page (also through municipalities), the INE was the one who selected the applicants, causing a heavy administrative load for the institution. A regional INE Director referred to the struggles with the selection: “at this stage there were problems due to the numerous applicants and the short time to pre-select and train, so that the final selection was not satisfactory" (Becerra, 2013a). Along the same lines, another regional director reported, “there was no time to interview candidates and make a better selection, especially of census takers. Local managers and supervisors were chosen by each communal manager” (Villa, 2013). Likewise, an INE interviewee recalls the complications of the recruitment process:

Such numerous details of administrative management were impossible to foresee in two, three months. It also happened that, for hiring people, they tried to find someone to outsource, and in the end, the only thing they could outsource was the recruitment.
But the selection had to be taken over by the INE. Imagine what it is to process 14,000 contracts, make payroll for 14,000 contracts, who does that? The administrative department of the INE, we say, well, our number varies [INE employees], sometimes we’re 2,000 or 3,000, but 14,000! It was then that, for three months, it was tough; the whole selection process was complicated.

The INE, through its central and regional offices, selected the applicants who fulfilled the requirements and sent them an e-mail informing the training’s place and date (La Tercera, 2012a). One of the greatest strengths of the de jure census strategy is that, unlike volunteers, hired pollsters are, by design better trained; moreover, given the relatively ample time available, the censistas can correct, consult on doubts with their supervisors, and learn, and thus collect better quality data (CEPAL, 2011b, 2014). Therefore, the training was critical, and the INE managers knew it. The training was conducted by "cascade" or “train the trainer” strategy, that is, the national trainers qualify the regional ones, who train the people in charge of the communes, and so on until the very last supervisor and surveyor of the territory. There were five days of training for the supervisors and four for the censistas, and the training covered the following topics: operational functions, the questionnaire, and the census survey (INE, 2014a).

Reports and interviews reveal that the training stage was not exempt from complications, some of the most-mentioned by the interviewees were: i) low attendance at training sessions. At the beginning of the process, few of the interviewers summoned to training actually arrived. ii) Delay in materials. In some regions of the country, training materials came late, which hampered the task of training. iii) Rushed training. The timeline did not allow field practices. In addition, training days were reduced. iv) Census takers waived half of their training. Some respondents declared this happened partly due to
confusion over wages and working conditions, so once those working conditions were clarified people abandoned the training. The following is how a censista described the disorganization of the process to the press:

It was a very disorganized process, because they were going to inform us by email and the emails did not arrive. They said we will start tomorrow, and it was not like that, and now it is still disorganized because there isn’t any material, which is the most important thing in order to start to census (Diario UChile, 2012b).

These difficulties triggered the alerts that things weren't going as expected, and the INE initiated strategies to ensure the training of census takers, such as: to summon more people to the training, to photocopy the training documents, to extend the hours of training, running online tests, among others (Becerra, 2013a; Villa, 2013). A census team professional stated, "we, with all the madness, made sixteen capsules [training modules], we did e-learning, we did face-to-face training, we did, a thousand things." Different INE interviewees agreed that despite difficulties in this stage—before the enumeration—they managed to solve problems and deliver good training.

However, as time passed, many pollsters resigned, and their replacements did not receive quality training; on the contrary, in the simple words of one INE interviewee, "they hired others and did not train them well, so those guys filled out the census questionnaires the way they wanted." Also, another interviewee alluded to the lack of preparation, but also to the lack of commitment on the part of the censistas: “that [the whole census operation] was so fragile, with zero experience in massive operations, with people who never in their life conducted surveys, as well. And then they weren’t necessarily very committed [to the work].
They did not necessarily know, then, bye! [They’re thinking] Let’s make it quick, *cachai*?

Later inquiries confirmed the exceptionally high turnover of pollsters, one of the major operational problems of the census. All told, after the initial hiring stage, 35% more pollsters were hired in addition to those initially trained (Bravo et al., 2013; CGR, 2015a).

Buttressed by the press and social media, claims of irregularities and lack of organization in the census arose throughout the country. In the social imagination, the new census had to compete with Republican ideas and the affection that Chileans had to the old census conducted by volunteers. Most of the comments alluded to how things worked compared to how they had worked in previous decades. The following tweets nicely encapsulate this notion: "When you make a list of mistakes that Piñera made in his government, don't forget the privatization of the 2012 Census and the destruction of a tradition" (Callís, 2012), and “in what sense is it better to privatize and outsource a process that, before, its own citizens were carrying out? What's Next? Pay for being a voting volunteer?” (Jara, 2012). Alluding to the census slogan, one blogger said, "I liked my country less modern, less safe, less professional ... it was a much more humane and much more entertaining country!" (Bravo, 2012). Likewise, below are the words of a census supervisor, who, in addition to denouncing the poor planning, illustrated the constant comparison with the old type strategy census:

The 2012 Census started with a weakness: the training was very sudden, very rushed and had few replacement people, compared to the previous censuses, in which the volunteer census takers allowed you to cover several sectors if you managed people...

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9 The word “Cachai” is a Chilean slang. Literally means catch? or get it? or am I right?
well. All these problems happened despite being remunerated today and therefore, in theory, more attractive to participate (Almarza, 2012).

A few weeks after starting the census, the Director and the head of the census informed teams throughout the country that, they should reduce the budget for supervisors and interviewers by 10% (CGR, 2015a; CIPER, 2013f). The news fell like a bucket of cold water over INE professionals since there were only a few days to start the fieldwork. Without much time to react, the teams began to dismiss interviewers, adjust their budgets, and make last-minute changes. An INE interviewee recalled the situation: “then, three weeks from the census, 10% less! It was shitty! And we just have to push forward, see how the rhythm goes, and see how we put it together." This sudden reduction in the budget generated ample tension within teams and contributed to the loss of confidence in the census process, as another INE interviewee recalled: “people had to be taken out of the training rooms that were already selected, and they had to be sent to their home! Therefore, in April, we started with fewer people, but the same data collection times!" Likewise, alluding to the meaning of censistas for the success of the census, another INE manager said, "and they the [INE authorities] took away 10% of the most valuable thing we had!"

The teams from the 16 regions of the country worked intensely to coordinate the resources and activities needed for the census and to adjust to the new resource conditions. It was a rather complicated logistics crunch that included having offices in each of the 346 communes of the country, transport systems adapted to the local geography, computers, and telephones. Both the regional and communal reports and the interviews carried out show the different strategies implemented by the INE teams to face problems and challenges in the territories.
The New Census Is Underway

On April 9, the enumeration process began throughout the country. Like all civic tasks, authorities, organizations, and media were called to participate, to learn about the questions and the new census system, to verify the identity of the interviewer, and finally to "open your door" to the censista (CNN Chile, 2012). Thus, in the first weeks of enumeration, the thrust of the news and information was educational and informative. For example, regarding the census workers’ appearance, that they "will carry a credential with all their data and also have a special outfit to distinguish them, for example, a blue backpack and a breastplate of the same color" (Emol, 2012b). Also, given the security needs required, there was a system to verify pollsters "by just typing the RUT [national ID number] document of the census taker. [Citizens] will be able to know if the person belongs or not to the institution" (GeoCensos, 2012). The topics that generated the most attention were the new questions of the questionnaire, especially on the cohabitation of same-sex couples, inviting to respond "#IDreamfor Chile that all same-sex couples declare it in this 2012 Census!" (Iguales, 2012). The 2012 census was the first to ask this openly, and was a milestone in the advancement of social recognition for the LGBTQ community in Chile (Movilh, 2012).

However, the calm did not last long; records show and interviewees confirm that a few weeks later, numerous problems manifested throughout the country: a lack of census takers, conflicts over salaries, and the resignation of pollsters. At the same time, there were areas of the country with a shortage of censistas from the outset, especially in the north of the country (where salaries are higher due to mining). The Antofagasta census, a city in the north, was especially troublesome: "Lack of pollsters complicated the first day of the 2012..."
census. Commissioners are training more staff to replace young people who deserted at the last minute" (El Mercurio Antofagasta, 2012).

Salaries were another point of conflict at the first stage of enumeration. In some sectors of the country, information about wages to census workers and supervisors was confusing, with the applicants understanding that the payment was greater than what they finally earned (Carrasco, 2013). This confusion provoked annoyance and public complaints about the poor preparation of the census, as well as a change in the labor conditions when the enumeration process was just beginning (Emol, 2012c). On this, a commune of the capital, a public demonstration was held demanding an official response on salaries, with the slogan: "no response, no survey" (Emol, 2012d). Likewise, a census taker aptly expressed her annoyance at the changes in working conditions, and denounced the situation into the press: “the advertising they did about the census was totally misleading: money cuts, change of hours and working conditions. I find it terrible because, in the end, they take advantage of one who is in need of work" (El Observatodo, 2012). In the following quote, an interviewee explains some of the confusions about the interviewers' salaries:

The census had not started, and there were problems because, of course, they said that there would be 300,000 pesos, but those 300,000 pesos were with a ‘bill.’ People didn’t know that 10% of the bill had to be reduced, and also the training was not paid, those two weeks were not paid10.

The authorities acknowledged the difficulties of the process, as stated by Flores, the Undersecretary of Economy, “We are hiring about 14,000 people, and it is probably the most

10 The “bill” or "Boleta de honorarios" is an invoice of professional services fees. In Chile, the Treasury withholds 10% of the value, which, depending on the level of the person's annual income, is returned or is part of their year’s tax payment.
important hiring event that has taken place in Chile in recent years, and when you have that amount of hiring there may be problems of adjustments” (Diario UChile, 2012a). The INE resolved these small strikes at that time, but the resignation of pollsters and coverage problems would be a constant throughout the next months of data collection. Later, Director Labbé delivered a statement describing some of the problems faced:

 Already in the first weeks, we showed problems of resignations of census takers for having to work on Saturdays and Sundays, and claims of some of them through the media for having to work on those days, and at different times than normal, even though it was clearly stipulated in the contracts. The census rotation was a continuous variable throughout the data collection (Labbé, 2013b).

Unlike a de facto census, where all people are waiting for the census taker at home on a specific day, a de jure census takes place over an extended period. Interviewees recall that in the 2012 census, citizens did not know what day the census taker would visit their home, nor the time of the day, and thus, the probability that the censista would not find anyone in the home was higher, especially on weekdays. This situation led to a severe problem of data collection. Simply, most people were not at home during office hours, as one interviewee commented on: “they hired census takers paid from Monday to Friday during work hours. But, how am I going to go if all the people are working? There are dormitory communes; then you have to go on weekends.” Likewise, another interviewee alluded to the poor design surrounding the working hours of the census, "It was an extremely long process because of the bad design. You cannot perform the census from Monday to Friday from eight until six in the afternoon!"

 Although the schedules’ difficulty was contemplated, INE officials stated that they never thought that it would be so severe. Once INE realized the magnitude of the trouble,
they employed—all over the country—a complicated process to modify the contracts of the census workers, changing the schedules of enumeration, reinforcing shifts on weekends and after hours. The following quote from a regional INE manager explains the chaotic situation and the type of arrangements made to face the challenge of enumeration:

And we realized that people were not in the houses and that we had to change schedules. Thus, that was another failure. Given the contract terms, the mode was mainly to hire for the daytime hours. But then at two weeks, you realize that it does not work, that is, instead of having three [pollsters] during the day and one at night, it should have been the other way around: one in the day, three at night.

Not finding people in their houses led to another complex enumeration problem: the incorrect classification of houses with inhabitants as unoccupied dwellings. The specialized literature and demography handbooks clearly warn about this problem of the de jure methodology, offering a set of detailed recommendations to avoid mistakes (UN, 2008; Chackiel, 2010). However, the situation of unoccupied dwellings or absent residents was difficult. One INE manager explained the problem of misclassification as such:

Imagine the next thing, the guys [censistas] bang on the door but no one opens. Is it a dwelling occupied with an absent resident, or is it an unoccupied dwelling? For example, the guys started to census here, 'no, this one is empty,' and they put the sticker on the house as being censused.

The problem was severe and was observed throughout the country. As a senior executive of the INE put it, "there was concern about two very important indicators in a census: the number of dwellings with absent residents—houses you see that have people who live there, but they are not there—and the number of unoccupied dwellings" (CIPER, 2013b). In many sectors of the country, if, after the third visit to the home, the interviewer did not find anyone, they should have identified that house as "absent resident", they nonetheless
bestowed the sticker on the house as an already censused household, generating another error, because "this had the logic of census the de facto and not the de jure" (Villa, 2013). The INE detected these problems and looked for different ways to correct them in what was a complex process for recovering misclassified homes; as stated by an INE regional coordinator, "for the recovery of absent residents the conditions of the contract were changed, modifying the schedules and days of work" (Becerra, 2013b). Likewise, another INE official recalled how difficult it was to manage the recovery task:

> We were not prepared to face the problems of absent residents. The schedules of the census takers and other field personnel were complex to manage. In particular, part-time enumerators, on whom lay the burden of recovering homes with absent residents, had a low level of commitment to the census and showed the highest rates of errors made in the questionnaires (Villa, 2013).

Despite efforts to correct errors, most of the energies were devoted to recovering homes with absent residents, as stated by an INE official: “the recovery work focused on housing classified as absent residents, but focused on houses classified as unoccupied dwellings” (Jara, 2013). An INE interviewed from the census team recalled how difficult the absent resident problem was for the enumeration process: “to not encounter people at the house was very serious, because later there was the need to go there again, going back and going back. That was fatal, fatal, fatal!”

When examining what caused this problem of household misclassification, the answers point to a set of factors. To name the most mentioned by the interviewees: lack of resources, insufficient supervision, inadequate training, and a dearth of pretests or pilots. Regarding the resources, the budget cuts led to inadequate supervision, as a regional Director explained, "the budget was already done, people were already hired, and although we had
some flexibility to make some changes, we could not increase the number of supervisors we needed." Likewise, another interviewee pointed out how the budget cut affected the fieldwork, "Initially, it had been considered to have one supervisor for every five census workers, but budget problems led to elimination the ‘second check’ of censused dwellings." The lack of pollsters led supervisors to put aside their work to support data collection, as stated by the head of the census, "supervisors ended up collecting data from the census and setting aside their functions" (Carrasco, 2013).

Some of the enumeration problems were due to insufficient training, as one expert declared, “due to the short training, [and] perhaps the inadequate training the hired officials had, they made mistakes like not identifying the difference between a house with no people and an abandoned house" (Cooperativa, 2013a). Furthermore, later demographics and data consistency analyses revealed more errors attributable to poor training (Arriaga, 2013; INE, 2014b).

Regarding the lack of proper preparation, INE interviewees agreed that several of the assumptions they worked with were never adequately tested, and therefore, they could not foresee these complexities of the de jure census. An INE high official stated this:

No pilot was performed; we should have done a pilot. Because the INE knows that the non-sampling errors are the most complex, they make the data more complex, and this census did not have a pilot, so we could not realize that the pollster could not reach the goals. What if, instead of enumerating ten homes, it enumerated five?

Another factor that affected the enumeration was the type of contract the census takers had signed. To simplify the contractual process, salaries of census workers were monthly and not tied to goals or incentives, which, combined with other weaknesses in monitoring and planning, generated unwanted incentives for pollsters (Bravo et al., 2013).
Accordingly, an expert pointed out, “thus, various difficulties stemmed from the fact that the census takers were paid a fixed amount and not per questionnaire, a customary practice in the market of surveys” (Neupert, 2017b).

Along with the problems of data collection, the INE faced another challenge: pay the censistas. INE informants remember that salary payments were delayed, resulting in rows and rows of people visiting INE offices demanding payment for their work in different regions of the country. An INE official remembers how difficult it was to face the pollsters given their legitimate demands:

I happened to receive people, and people told me: you know? I did not come to the office to ask for a free service, I came to ask for the work I did, I want them to pay me for what I did ... and they were right!

Interviewees gave different reasons for INE’s struggles with the contracts and payments of census takers. On the one hand, the characteristics of the Chilean public administration, which has a quite strict regulation about hiring procedures, to ensure the suitability of the person applying for the position, avoid nepotism, and the transparency of the process (Rajevic, 2008). Interviewees agreed that these requirements, ultimately, posed an additional difficulty in the process of hiring and paying census workers. The other primary reason for the INE’s problems was its lack of experience and capacities to process a large number of contracts, payments, and additional administrative charges. This led an INE regional manager to recall, “there was also a lack of administrative personnel to support these tasks and there were delays in the processing of payments, which led to some conflicts with the censistas” (Becerra, 2013a).

Those who were part of the INE report how difficult it was to assume the enormous administrative burden that meant to hire and pay thousands of interviewers, and to solve
problems without the proper preparation or resources. All this added tension to a work environment that was already quite degraded. As one INE official recalls, "the technical issue was combined with the administrative issue, that the INE could not pay if there were 16,000 contracts! This, and other difficulties triggered the relationship [within the INE] to be stressed."

**A Long, Long Census…**

In mid-June, after more than two months of data collection, the INE and the citizenry understood that there was a lag in the enumeration—in some areas of the country more than others—and in general, the problem was about the “absent resident.” These difficulties led the authorities to define an extension in time, an additional three weeks of data collection (Cooperativa, 2012). The zones with greater lags were those of the north of the country due to the shortage of census takers, and the communes of the affluent neighborhood of Santiago, where access for censistas was particularly tricky due to several reasons: people were not at home, there was greater fear and resistance to open the doors to surveyors, condominiums were difficult to access, and communities closed (Labbé, 2013a; La Tercera, 2012c). Time passed, problems continued to accumulate, and the general feeling was of tiredness, and a lack of confidence in the enumeration. Social media was filled with comments and jokes about the census taker that never arrives, or questions of why, if their home had not been surveyed, was a census "sticker" on their doors. The following story of a citizen through social media expresses the feeling of that time,

In front of the TV cameras, many families reported that when they returned from work to their homes, they found the sticker attached to their doors, under the circumstance that nobody had surveyed them. And others literally said they were left
waiting, like 'Penelope,'\textsuperscript{11} and as much as they hoped that someday some pollster would knock on their doors, it never happened (Campos, 2013).

The resignation and rotation of censistas was a persisting problem throughout the census process that distracted managers from their expected roles of supervision, quality control and recording progress. Given the difficulties, many of the INE's efforts in the territories concentrated on the basics, i.e. ensuring that there were enough pollsters to census. The INE report stated, “The measures designed to control the censistas turnover during the project were overtaken, as they [INE communal managers] were no longer just responsible for replacing staff, but had to be in charge of constantly recruiting people” (INE, 2013b, p. 32).

The process was not exempt from vices and bad practices on the part of the interviewers, and the social networks and the media spread that information with enthusiasm, too, thus becoming a means of reporting and denouncing problems as they occurred. Some of the irregularities detected were: not asking the questions correctly, marking the house as unoccupied if there was no response to even one inquiry, asking only some questions and "filling in" the others, inventing missing data or assuming information without asking the questions, among others (Almarza, 2012; Emol, 2014; UAH, 2017). A census taker of the Maule region admitted, "It was an open secret that the way we did it, it did not allow us to finish and do a good job, so we had to resort to some vices to move it forward" (Emol, 2014). Another pollster describes these “vices:” "When I went to a villa where all the houses were

\textsuperscript{11} This expression alludes to the famous character from the Greek tragedy The Odyssey, who, for many years, awaits the return of her husband, Ulysses. Thus, the figure of Penelope has become an emblem of patience and endless waiting.
the same, I would skip those questions and fill in the answers, so it would end faster, and I could go to lunch at my house” (Emol, 2014). Likewise, a census taker of the Valparaíso region said that she observed lack of motivation in other censistas; noticing that for example, they said, "Why should I do this? If they are going to pay me anyway’ or 'I won’t walk there anymore' [in areas where the houses are far away]" (La Segunda, 2014). A supervisor recalls, “censistas in some cases were corrupt, and maybe they falsified data, they surveyed non-existent houses, stuck stickers without taking into account housing and its inhabitants, or they simply resigned due to such disorders” (Almarza, 2012). Accordingly, the following blog lines reflect the questioning of the incentives of the census takers, the constant comparison to the previous census modality, and the complaint about lacking supervision,

When economic incentives condition the primary survey of information, can we trust that this information will be taken properly in all cases? In the previous census modality, two interviewers were in charge of the census of each household, and the key to the process was monitoring, not the stipend (Jara, 2012).

With social media on top of censistas and always vigilant, the teams at the regional and communal levels were exhausted, and the relationships between different actors involved became tenuous after months of a very grating census. The interviewees who participated in this stage remarked that it was a long process, much longer than everyone thought. For them, the most tiring tasks were the additional logistic efforts to census those habited dwellings and to correct the errors of those classified as not occupied. INE interviewees remember that the process was so draining, as stated by a regional INE professional, “In the de facto census you prepare yourself, but it is a headache that happens to you in a day, it is 24 hours that you push through. But this census is three months, three months and a half…”
Some interviewees also considered that the excessive duration of the census generated more problems, specifically a loss of confidence and tiredness. In addition, in the case of the de jure censuses, a longer enumeration period increases the probability of errors of "usual residence," whether of duplication or omission (UN, 2008; Nathan, 2018). Knowing this, an expert commented on her concern about the census extension and the effect on the quality of data grabbed: “this was July, August 2012 and I almost had a panic attack, atrocious, my God, how? There were four months enumerating, four months! Meanwhile, people moved. Meanwhile, people had no idea!”

Not Reaching the Goal

As stated, one of the advantages of the de jure census modality is that it allows correcting mistakes along the way (CEPAL, 2011b). For this purpose, the INE designed a particular control and supervision system, the Census Progress Control System (CPCS). The system observed the progress for each territorial office and therefore detected difficulties and lags. Each territorial office inputs their advancement into the system on a daily basis, which allowed the regional units and the central level to observe the progress concisely. An INE official described the system and its advantages, “the system informed the director daily, all the managers, the regional directors, all over the world, of the progress of the census, locality by locality, commune by commune, region by region, the country.” Likewise, but more critical, the INE CEO commented on how they made use of the system information,

We began to hold weekly meetings where each area chief in Santiago explained what percentage of coverage they had. We had daily reports from the regional offices, so that in the face of a problem generated in a region, we could devise a solution and distribute it throughout the country to the extent that it was applicable. We acted
fairly agilely in that sense, but not with all the due transparency because not everyone had access to information.

Effectively, the CPCS allowed the INE to monitor progress and correct along the way. Also, it was through this system that the different teams (national, regional, territorial) grasped that they would not reach the weekly and monthly census goals, as described by a regional INE official: "We had this management control system, and there was a goal, and I could see it: we are not going to reach this goal, impossible, I mean, at this rate of performance of the country, impossible!" Likewise, another INE official remembered how they quickly realized that the census performance was below expectations, "I started to observe things and to have meetings with the heads of operations, and I realized that this situation is going badly, beyond the point of return, due to the low rate of data collection."

The numerous difficulties in the data collection and the magnitude of the lag were exacerbated by the lack of motivation, as described by one census team interviewee:

At some point they [the INE authorities] finally asked for help, everybody in the INE came out; we [the census] were already with a level of delay that we could not cope with and, besides, people were unmotivated, did not have the same commitment, did not have the same faith, it was a problem. Saying, no, this is a mess, it is, and I do not know what to do.

By order of the head of census, only a few in the INE had access to the CPCS. INE interviewees pointed out that Labbé did not trust the INE executives and therefore kept them out of census data collection. Thus, the enumeration progress was in the control system, but not shared. One interviewee explained the layers of protection: “the information was entered, but it was not reported to the operations people, because it was a data handled under seven keys, which were managed by the head of IT, the head of the census, and the Director."

However, and contrary to these indications, the CEO shared her passwords with the INE
teams so that “they [INE officials] could alert her [Alcérreca] daily to their analysis because she did not have the technical knowledge” (Alcérreca, 2013).

Even with all the internal tensions at the INE and the restrictions on access to the progress on reporting, the CPCS forewarned the INE over the country about the problems of data collection. However, according to the interviewees, Labbé and Carrasco did not trust the professionals that delivered the analyses. A high INE official recalled a situation arising from this issue:

We had a meeting where the technical team delivered a report saying this is a disaster. The report was elaborated at the beginning of July, projecting how we were going to finish, and the projection says—because they know the matter—that we were going to end up with a population of 15.7 million, which was a million short of what we should have. The professionals revealed the existing differences in unoccupied homes, dwellings, as well as dwellings with absent residents. Those 'who know' [experts] at that moment said: 'This issue is wrong, some data does not fit, hey, this is happening.' There was no fieldwork control; there was no supervision.

However, the interviewees reported that by then, the work environment in the INE was already tenuous, and the tensions between the groups did not allow for better information use. Also, the interpretations of the information were different: in the words of one of the INE interviewees, "We [INE officials] would see the figures on a screen, and some would feel satisfied, and others would be terribly nervous.” Thus, some interviewees believed they could have done much better if they reacted on time to the alert information. As an INE advisor interviewee explained: "I believe this, I insist again, if we had paid attention to everything we were seeing, we should have corrected the actual operation of the data collection, and we could have done it."
There is abundant literature discussing mechanisms and statistical procedures to address census omissions (Tacla, 2006; Chackiel, 2010; Mendez & Sacco, 2016). According to international standards, to assess the census undercount and the quality of the data collection there are two approaches: indirect (demographic analysis) and direct evaluations (Post-Enumeration Survey or PES). The postEnumeration survey should be carried out shortly after completing the enumeration by an independent team of highly trained survey takers and based on probability sample methods that allow collation case by case (Chackiel, 2010; UN, 2017, 2010b).

Following recommendations, the INE Technical and Operations Sub-directorate were in charge of running this survey. However, due to the problems of data collection, the lack of access to information required for the survey, and the many tensions within the Institute, the post-census assessment also suffered delays and several modifications. An interviewee from the PES team remembered how hard it was to jumpstart the survey: "It was crazy because we designed it. But then they [authorities] said no, it is not starting. Then, the President asked for it, and they asked us to perform it in a month, but with a lag of many months." Likewise, another interviewee recalled that the census team did not provide the necessary information promptly to adequately design this survey,

I needed information that they [the census team] had to give me to do the design of the post-census survey, and they did not give it to me, and they did not give it to me.

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12 Post-Enumeration surveys (PES) have the following objectives: to assess the degree of coverage during census enumeration, to examine the impacts of coverage deficiencies, to grab data for future censuses and surveys and to examine the characteristics of missing persons on census enumeration. In addition, the under- or overcount are the bases for adjustment factors for further population estimations. Depending on the design and characteristics, the PES may address one or more of these objectives (UN, 2010b, 2017).
And later, [by the time they did] the survey was poorly done because it was done just to get by.

The INE implemented the survey four months after the completion of the census, which technically meant that the survey was not useful for measuring the census omissions, as it was applied with too much lag, contrary to international standards. In the words of an expert, "It was very late, and I don’t know, I mean, it did get done […] and it did not work for the purposes that were expected."

5.3. Third Stage: The Census Controversy and Evaluations

This third stage of the case points to the heart of policy failure and its convoluted nature. This section describes the reactions, debates, and accusations unleashed when the census results came to light. Given the controversy and confusion over the census data, there were various inquiries to assess the data's quality and usability, the legal and political responsibilities for the errors, and administrative irregularities. In a climate of disagreement, conflict and accusations characteristic of policy failure episodes, the polemic over whether or not the census was a failure, who says it was, under what criteria, and who are to blame, lasted a long time.

The Census Results and the Communication Game

The enumeration started in April 2012, and in some areas of the country, it was not completed until the end of July 2012, a period of almost four months, much longer than planned (INE, 2014a). However, once the census was completed, the government presented preliminary results as a great success, claiming 98.5% of the country's homes. Minister Longueira proudly declared, “[the 2012 census] elevated the Chilean census internationally,
with a methodology according to the times we live in, and this allows for better information to design public policies to accommodate Chileans for the next ten years" (La Tercera, 2012b). The announcement also emphasized the “historical coverage,” with low omission rates, much lower than other countries in the region (La Tercera, 2012b). Days later, the INE launched preliminary census results—manual counts of housing and population delivered by the census takers—announcing that the number of Chileans was an estimated 16,572,475 habitual residents (INE, 2012; LT, 2012).

These announcements ignited the spirits of the INE managers and experts, because it was not clear how the number of Chileans was estimated. Although the 2012 was a population and housing census and censistas visited households, in a population census one of the essential features is the individual enumeration (UN, 2008, 2017), therefore reporting coverage at the housing level leads to confusion. Likewise, an opinion piece expressed: “a census without counting people is like playing soccer without goalposts […] the omission is calculated based on people and never based on housing, which is the estimate of coverage referred by the INE Director, the Minister and the President” (Mayol & Azócar, 2013). These figures increased the already existing suspicions about the data quality.

About hearing these initial results, one expert interviewed described his reaction, “so, was this the count of people actually counted or was it already an estimate? That is, it seemed strange to me because the estimate takes months." Indeed, the processing of census data requires a complex editing and estimation procedure to address both content and coverage data problems (CEPAL, 2011a). Specifically, this involves developing a series of analyses,
tests, and adjustments ranging from correction of simple content errors (such as misreporting age) to missing population estimates through very specific statistical designs.\footnote{The evaluation of content includes: evaluation of the age declaration, analysis of database records, analysis of the internal and external consistency of the data, monitoring and assessment of the quality of data capture and codification, and the application of specific census consistency statistical packages, as well as countries’ census experiences (Bankier, 2007; Chipperfield et al., 2017; Thorvaldsen, 2006).}

Interviewees recall that these figures were only the beginning of several technical disputes over the information delivered. The supervision system showed that 15.8 million were registered; but this was not the figure disseminated to the public, because it exposed coverage problems. Then, under the argument of more transparent communication, the INE published that estimate, but without saying so\footnote{The population actually censused reached 15,758,929 but the INE published that it was 16,634,603 that is, 875,674 people corresponding to the estimated and imputed population (INE, 2013a).}. The discussions about what to present and how to do it were rough, so the INE’s CEO explained, “Do I have actually registered 15.8 million or do I have registered 16.6 million? There begins the discussion of what figure it is and how it will be delivered. And there the technical team no longer participated: it was marginalized” (CIPER, 2013b).

Authorities operated under the assumption that there was a certain percentage of absent residents, and therefore, it was possible to estimate the missing population. However, at the time, no one knew the methodological criteria for making these estimates. According to INE interviewees, everything happened "between four walls." The absence of technical discussion and lack of transparency led the entire INE to suspect that "census data was being cooked."
There is still a spectrum of positions on why the INE communicated or handled the numbers in the way they did, even knowing it wasn't the correct way. For some interviewees, it was because Labbé wanted the best census. So, said one interviewee, “then why lie? That is above my understanding, I swear! That's why I tell you that it is pure human stupidity of egos because there was no reason to lie.” For others, it was a communicative awkwardness, as another interviewee said, “what was clumsy is not having explained that this is an estimation, that is if he had said: look, this is the census, this is the estimate of absent dwellers and this is my estimate.” For another group of respondents, the number adjustment was framed as a communication strategy to make the data easier to understand, as stated by a Director’s advisor, "that number, nobody ever doubted that it had to be given, it was the way. How you deliver the data so that people understand. It is how you deliver the data and perhaps associate information so that it is [perceived as] correct." Building on this, another interviewee declared, "I think it was simply a mistake of appreciation. Sometimes you simplify things too much to the public, because you presume that people will not understand. It can cost you dearly.” However, later, the head of INE's department of social studies declared,

Mr. Labbé made the decision not to make the difference between the census population and the imputed population transparent despite having been warned on countless occasions that this had to be done, even despite receiving a memorandum with a recommendation from the United Nations, so it cannot be said that it was not known (Cámara Noticias, 2013b).

While that discussion was only about the initial figures of the census, data processing was done in the following months, and with that, there were even more issues. The
processing included an optical reading of the questionnaires, generation of the databases, and a series of subsequent corrections, estimations, and analyses (INE, 2014a).

After months of processing the information and various conflicts and technical disagreements within the INE, the government presented the final census results in a colorful ceremony with the highest authorities (LT, 2013). Again, the stamp on this presentation was that this was the best census in Chile’s history. Conscious of the poor quality of the information and errors in data presentation, some INE high officials attempted to prevent the presentation of the census results, and mainly to prevent the President from participating in that ceremony, but they were not successful.

The days following the presentation were filled with subsequent corrections and addenda to the census. In the opinion of INE managers and experts interviewed that was a clear signal that the analyses were not well conducted or guarded. The census results had numerous and very grave technical errors: absent dwellers included in the number of those actually registered (CIPER, 2013a); the fertility rate was poorly calculated (González & Roa, 2013; Alcérreca, 2013); a high male omission rate that could not be explained due to demographic reasons, among others (Arriaga, 2013). Alluding to the inconsistency of the data, an opinion piece sarcastically pointed out: "The INE took a ‘photo’ to Chile and came out a strange combination of German fertility, the proportion of men from countries at war and the population of La Florida [commune of Santiago] 11 years ago" (Mayol & Azócar, 2013). Some of these problems were detected by the INE departments of demography and social statistics, and also by specialized analysis, such as the renowned international demographer Eduardo Arriaga, who even without knowing he analyzed the database...
containing imputations, warned of severe data inconsistencies (Arriaga, 2013; Paulsen, 2013).

The “Letter” Episode

Everything that happened during the previous stages of the census and its subsequent processing "behind closed doors" had left a deeply divided INE with easy-to-identify sides. On one side were the Director, his advisors, and the head of the census; on the other stood the department heads supported by the "INE CEO" (this latter was also Director's advisor). Interviewees commented that there was an atmosphere of distrust, heated technical discussions, and much strife in the organization. One of the INE manager interviewees explained the origin of the dispute:

Labbé always said that we wanted to boycott the census […] He never understood that there was a professional, a technical question here, it was a matter of protection, and that is, it was a matter of minimum professional responsibility, which was what happened.

Additionally, there was a leak of census data to the press—presumably done by Labbé's advisors—which ignited the atmosphere even more, because for INE officials it is extremely serious given the statistical secrecy. Thus, the leakage problem, and the census results—with all the errors and the complicated delivering to the citizens—generated an intense dispute within the INE that ended up with the firing of the head of the technical area, Marcela Cabezas, who according to different interviewees, is a woman of reputed strong character and highly respected for her technical knowledge. This situation triggered the reaction of the INE's leading officials, who wrote a letter to Labbé and leaked it to the media, denouncing severe problems in the census information delivered and raising the alarm about the management of the INE. The high officials claimed, "We express concerns about his
Labbé] conduct in command of the institution, we've experienced a real setback in handling technical issues" (Radrigan et al., 2013).

The letter is an expression of a workplace embroiled by a lack of respect as well as technical arguments that finally erupted. In the words of one of the signers of the letter interviewed: “the goal behind the letter, the goal we had, was to safeguard or try so that the institution was not affected regarding its credibility, that was what we were looking for.”

Likewise, another high official of the INE explained, “and the departure of Marcela triggered the letter, not even because of the census issue, but we, the eleven [signatories], worried: what is going to happen with ‘the technical’ within the INE?” Different INE interviewees agreed on the intent of the letter since the greatest preoccupation was the INE’s leadership and the threat to the technical quality of the INE. As indicated by an interviewee, the political motive of the letter was to draw political attention and hopefully cause changes from the INE management, as stated by another interviewee, "because what they expected with that letter, and that is why they released the letter, was to shake up the economy ministry to get Labbé out.” It is necessary to recall that the census issues (which would explode a few days later) were not the focus of the letter, as one of the signatories of the letter wanted to make very clear,

But there is something that people do not know, to tell the story precisely: we wrote this letter because it was already ‘a mess.’ We had no idea that they [INE authorities] had lied in the census. About the census we found out later. We did not ‘create the scandal’ because of the census data, but because of the problems of internal management.

Despite their agreement, many INE managers and high officials who participated in the meetings did not dare adhere to the complaint and to sign the letter for fear of being fired.
As expressed by an interviewee outside of the INE, "I mean, all those who signed knew they were putting their career at stake, but we were trying to protect the technical autonomy that an institution like this must have." Other INE professionals were extremely upset with the letter because, as the old saying goes, "dirty clothes should be washed at home." For a few, the letter revealed things that should have been resolved within the institution, and those things published damaged the prestige of the INE.

Based on the evidence in the case, the letter did not meet its objectives. Later, when the controversy broke out, it came to light that Director Labbé dismissed the letter and attributed it to "internal struggles and animosity toward him from the INE teams" (Sáez, 2013), and therefore, the minister of economy did not react to it. A political analyst explained the authorities’ reaction to the letter: “Labbé told the government that it was an almost emotional dispute over having fired Marcela Cabezas, INE technical Sub-directorate. Such an explanation made sense to the executive branch, and they allowed Labbé to continue doing his job” (Sáez, 2013).

The Accusation of Data Manipulation and the Eruption of the Media

The letter was only the first step and did not create as much of a stir as might have been expected; instead, a larger controversy about the census broke out days later when Mariana Alcérreca, advisor to the INE Director and considered as the CEO of the INE, decided to reveal the seriousness of the situation at the INE through a prestigious investigative journalism newspaper:

I tried to give all the possible alerts within both the institution and the ministry of economy, and they did not listen to me, and I have come to the conviction that the truth has to be known. Because the INE is a technically autonomous institution, which
houses a heritage of great value for the design of all public policies of the country (CIPER, 2013b p. 2)

The accusation was brutal. The heading of the newspaper exclusive was: “INE Director might have manipulated the 2012 Census figures” (CIPER, 2013a), followed by: "Mariana Alcérreca: In the 2012 Census, yes, there has been manipulation" (CIPER, 2013b). These articles unleashed the polemic of the census, generating an endless string of news, and provoking diverse and heated reactions.

The statements to the press by the INE Director’s advisor represented a breaking point. Alcérreca herself and several other interviewees recounted the different failed efforts to warn of the technical problems that the census was facing: first, numerous conversations with the INE Director Labbé and the head of the census Carrasco; then, meetings by the INE with the central government (the chief of staff of the ministry of economy) to warn about the poor quality of the census data and the risk of announcing that truth to the public. As noted, those efforts to prevent the announcement of doubtful census results were unsuccessful.

The press investigation disclosed abundant information about the census process and its irregularities, and in particular, about data imputation that happened behind closed doors and with no precise technical foundations, applied by Labbé and close collaborators.\(^{15}\) It was already clear for several actors that the INE was suffering some institutional crisis, but most

\[^{15}\text{Among the methodologies to overcome census coverage problems, there are some that estimate missing population or other missing information by using "donor" data. One of the methods currently used is the Nearest-Neighbor Imputation Methodology (NNIM), which is a complex imputation technique that extracts data from the closest similar neighbor to replace missing information (UN, 2010a).}\]
of them learned about the census data problems due to this press report. As one interviewee recalled,

At that time, it was not even known, the INE’s technical teams did not even know that they [INE authorities] were lying. No, all that level of detail, the estimations and all of that, nobody knew! They suspected, but we did not know and many of the things we found out, well, almost everyone found out through the reportage. That is, people suspected that things were going badly, but not with that level of detail.

As with the letter, opinions on this matter are diverse. For some actors, the press report was an act of desperation at the threat of inadequate and irresponsible management, and particularly about secrecy concerning the census data handling. In that way, many understood and even justified the decision to go out to the press. An interviewee alluded to the difficult position in which the INE CEO was placed: “sooner or later Mariana knew that the scam of the data was going to be disclosed and they were going to ask her: why didn’t you tell us? She was between the rock and a hard place.” Another interviewee declared, “the officials did everything possible to get out in the best way, but there came the point where apparently there was no other way out.” Likewise, another interviewee of the INE comments about the crossroads of the moment:

I believe that extreme conditions require desperate decisions … because I told the director: director, this question does not go over here, and not only did I tell him this, the whole team told him, and he still made the decisions he made. So, you say: how long should we wait?

Alternatively, several interviewees are grateful for Alcérreca and her denouncement. They consider her brave as expressed in the following quotes: “then when Mariana writes this, and for us, it is a relief, someone understands us there, someone speaks for us. She is the ‘Wonder Woman.’”, and “She finally immolated herself for a greater good.” So too, in the
following quote, another interviewee justified Alcérreca’ action because it emphasized the importance of public institutions:

I think the situation warranted it, because such was the technical and ethical commitment of the people who worked at the INE. That we knew, we knew, and in that, I included myself, that a bad job does not [only] affect people. It affects the institution. People pass, but the institutions are those that remain.

Other actors, those close to the political right, perceived the public denunciation in a vastly different way. They believed that Alcérreca betrayed Labbé and Piñera's government (she was officially Labbé’s advisor), and they also felt the accusation was a political act, a plot to discredit the "Piñera census" and the management of the ruling right. For some actors, the indictments that went out to the press were part of a larger scheme to contribute to the re-election of Michelle Bachelet in 2013. When Labbé resigned, he stated, "I do not doubt that there are political reasons disguised as technical aspects and I am prepared to defend myself" (Diario UChile, 2013a); along the same lines, a Labbé advisor interviewed showed his conviction that this was a plot against Piñera and nothing else:

I believe that there was a plot, a political plot to damage the census, to harm Piñera and that’s what it was. And I confirmed it later, that’s why I tell you it was true. I talked with certain people and they explained to me that the strategy was actually to destroy the census to beat Piñera. It was as simple as that.

Likewise, another interviewee, a director's supporter, pointed out the combination of the betrayal of the right-hand director with the political plot for electoral purposes:

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16 In Chile, currently, the presidential term is four years without re-election in the following period, but possible at the subsequent one. This explains the particular situation that the last four presidential terms correspond to two presidents alternately. Michelle Bachelet (2006-2010), Sebastián Piñera (2010-2014), and then again Bachelet (2014-2018) and Piñera (2018-2022).
There are two factors. One, a small internal betrayal by a key person attached to the director, which was Mariana Alcérreca and, on the other hand, everything that an electoral year entails, cachai? It is destroying a public policy to get an electoral benefit.

Some interviewees refer to the "political plot" or "conspiracy idea," as well as other explanations of a political nature. As will be seen later, these political explanations continued for quite a long time. However, most respondents disagreed with these ideas. A former INE high official emphasizes how ridiculous the boycott hypothesis was:

No one at the INE, no one, wants to make something they do fail. No one. In other words, for them [INE officials] the census is a party, it's such an important event, they feel they own the country in one day, that's an event that marks them for the rest of their lives, so there's no one in the INE that wants to make the census fail, not because it was organized by Piñera or because it was organized by someone else, no, no one!

The mere idea of manipulating data in the INE would have been considered crazy, something impossible to believe given the history of technical rigor and probity. However, when the complaint about the altered census data arose, experts and public opinion didn't reject the idea. This begs the question, why? In part was because regular citizens were aware of numerous problems in the enumeration process; but also because the complaint coincided with other data problems of the INE and government agencies, in particular the polemic with the CASEN survey of poverty measurement and the questioning of the CPI figures (CIPER, 2012b; El Mostrador, 2012, 2013a; La Segunda, 2013a). Consequently, given the recent history, the academic community wasn’t surprised with the census denouncements; this is what one specialist claimed:

The fact is grave because it happened after several questions about the National Statistical System, such as the results of the CASEN survey, the measurement of the CPI and the splices in the employment figures, which ended up generating distrust in
the national indicators […], and yet given the circumstances that Chile had always been respected for the quality and seriousness of its official figures (Sanfuentes, 2013).

Likewise, alluding to the arrogance of the Piñera government and the desire to “being the best,” an analyst commented: "They [the government] began to modify all the instruments and have wasted everything: the census, the CASEN, the employment figures, everything!" (Jimenez, 2013a). Along the same lines, the prominent economist José de Gregorio reacted to the census problems by pointing out: “this [the census problem] came with the history of the CASEN, in which there was a data presentation that was not very transparent, methodological doubts, decisions of doubtful validity, some manipulation of results” (Emol, 2013). Social networks also echoed this sense of damage to institutions, “Piñera specializes in destroying institutions. He began with environmental institutions and continued with CASEN, SII, INE and SERVEL” (Lupin, 2013), another tweet stated, “the Labbé management in INE has the seal of this Government. Extreme arrogance, contempt for existing institutions, sense of impunity” (Gumucio, 2013).

**Assessing the 2012 Census**

Based on these accusations, the government asked for the resignation of Labbé and his collaborators, and immediately ordered an inquiry by a national commission of independent experts in charge of analyzing the methodological and institutional issues related to the census and its results. A characteristic of policymaking in Chile is the existence of a tacit and robust alliance between expert knowledge and political power, particularly with the president (Olavarría-Gambi, 2016). Consistent with this approach, the formation of expert committees has been a common practice in Chile over recent decades. Governments have convened panels of experts to advise, evaluate, or formulate policies on education,
transparency, pensions, childhood, among many others (Aguilera, 2009). It is considered an honor to be a member of one of these committees. The specialists work pro bono, and although the results of the commissions have never been binding, they’ve always been valued technically by governments and appreciated by the citizenship. This commission of inquiry was the first of several investigations and evaluations of the 2012 census, which will be detailed later.

In the midst of the political and communicational crisis, the undersecretary of economy Tomás Flores and the incoming INE Director Juan Eduardo Coeymans summoned commission members. It was constituted of five data experts from both the government and externals, which included: a researcher in data analysis from the University of Chile, a researcher of the United Nations Development Program (UNDP), the coordinator of the demography area at CELADE, the head of the social observatory division of the social development ministry, and finally an analyst from the housing and urban development ministry. Two of them had participated in previous public policy commissions (CIPER, 2013d). The composition of the commission did not seem to be a problem at the time, on the contrary, as in other times in Chilean history, the government announced the names, and the experience of each one was valued. However, as will be explained later, when the results of the inquiry came to light, the commission was criticized and discredited.

The primary task of the commission was to examine the quality of the data collected, and for that, they worked exhaustively, running sundry tests, gathering testimonies, holding hearings with the INE officials, and documenting the process and results. Given that the census databases were not yet available, the experts initiated the inquiry process by interviewing those involved in the formulation and implementation of the census. The
members of the commission interviewed for this study commented on how shocking it was to uncover the massive amount of census problems. One member recalled, "It was a thing that they [INE] never imagined, the dimension it had. The moment we started talking to people, the lid come off the pot, and it was so frightening." Another member commented,

The moment when we realized that this was indeed a significant issue, it was when he [the head of the census] basically told us: ‘I arrived at my house late, about ten o'clock at night and saw in the control system that lack of coverage. The fallout was coming…’ for what he told, finally, was all poorly planned.

After three months of inquiry, the commission determined the census had “serious problems” in essential aspects of this type of instrument and recommended not to use the data for official public policy purposes. The report (2013) pointed out:

The omission rate of the population is conservatively 9.3%, which is three times those obtained in recent censuses in other countries in the region. In a fifth of the communes, the omission rate would exceed 20% because, in them, a concentration of factors that cause coverage problems occurred […] The problems described seriously compromise the achievement of the main objectives of the census, which is to count and characterize the population and housing at the country level, regions, provinces, and communes in urban and rural areas (Bravo et al., 2013, pp. 2–5).

One of the most problematic issues that the commission found was the misclassification of occupied housing as unoccupied, which led to several inconsistencies with the pre-census and the projections of population growth. The INE authorities tried to correct this problem through the imputation of unoccupied housing (and then households and persons in a similar fashion) with the procedure relevant to non-responding dwellings, which is a separate situation, and wasn’t applicable nor an accepted practice (Bravo et al., 2013). According to interviewees and later inquiry reports, they applied a “version” of the nearest-neighbor imputation methodology NNIM (UN, 2010a), which in practice meant that more
than 200,000 households and nearly 800,000 people were “cloned,” that is, all household data was replicated to fulfill the missing dwellings.

The investigation also revealed the magnitude of the census implementation problems. Training was supposed to be conducted under the “cascade approach,” where supervisors and full-time enumerators received five days of training and part-time enumerators three days. Despite the planned replacement of 20% of enumerators, the turnover was higher than expected, and there were several local reports about troubles in hiring new interviewers. Records show that nearly 26% of the enumerators did not receive any, or merely partial, training (INE, 2013b). Another issue related to the miscalculation was that initially there were an estimated 14,000 enumerators, but that number ballooned to over 17,000, which generated administrative burdens for the INE. This irregularity was also another signal of the difficulties in the enumeration process (Bravo et al., 2013).

As a result of the inquiry, the experts identified some elements that might have affected the census implementation: poor coordination between different areas of the INE, inadequate estimation of the cost of the new method, poor training, high turnover of interviewers, a lag in progress reports, sudden budget reductions, and a misuse or neglect of the supervision system, among others (Bravo et al., 2013). All this and other elements detected created a litany of institutional, organizational, and local challenges to running the census consistent with the initial plan.

However, the most controversial conclusion of the inquiry was that the census data was not suitable for policy decisions, and thus endorsed a plan to repeat the census in a reduced format, which sparked a series of statements throughout the entire political and academic spectrum. Reacting to the results of the inquiry, the new INE Director declared: "I
expected a tsunami, but not of this magnitude” (El Dinamo, 2013). For all the interviewees, the results of the investigation were surprising. Most INE officials knew that the census had many problems, but they never imagined the conclusions would be so drastic. An INE interviewee told how shocking the investigation results were:

The people of the INE expected the census to have problems; they expected that at the communal level to have complex problems in some areas, and that indeed there was going to have to be a way to rescue some information … But when the results of the report came out, it was so dreadful. We were stunned because it was shocking. It ended by saying there isn’t an INE anymore.

INE officials knew the census had several flaws. For most of them, the data imputation mechanism and the lack of transparency were the critical points, and what raised the most suspicions. Other interviewees acknowledged the significant coverage problems, and they expected the investigation to identify them. However, no one expected such a stark and cutting conclusion. Why was it so excruciating for the INE? An interviewee explained, “I don’t think anybody at the INE expected that the commission was so dreadful, nobody. We all realized weird things in the census, but nobody expected the commission to be like that, so drastic!” Likewise, another INE professional described the paling of his personal concerns to what the INE was facing: "I almost fell apart, because I thought that they were going to say that I had a huge omission problem and the whole story, but at that point, I did not know that the whole database was bad."

**The Forgiveness Episode**

The report's findings of the recommendations of the commission were strongly critical, so much so that even President Piñera himself apologized to the country: "Indeed mistakes in planning and execution were committed in the 2012 census. I want to humbly
apologize to all Chileans for all those mistakes" (CNN Chile, 2013). The President also declared his annoyance with the errors: "when I was informed of these errors I felt the same annoyance and the same indignation that millions of Chileans have felt throughout the country" (CNN Chile, 2013). Piñera’s apology marked another milestone in the case, and ended up deepening the idea of a failed census, and hindered subsequent attempts to rescue the data.

The idea of policy failure during the first Piñera administration is ironic. This was the first right-wing government after 20 years of left-wing coalition administrations, and Piñera’s political motto was: “24/7” (to work to improve the efficiency of the country). Likewise, many of the arguments to overthrow the previous coalition focused on policy mistakes that occurred during the Bachelet administration, and most especially the failed policy of TranSantiago17 (Olavarría-Gambi, 2013, 2018), and the failures in the management of the 2010 earthquake and subsequent tsunami (CIPER, 2012a). Thus, from a political stance, the failed census is one of the deepest wounds of the first administration of Sebastián Piñera. It points at the very heart of a "government of excellence."

Consistent with the idea of policy failure as eminently public, the results of the experts’ commission echoed throughout the national and international press. Numerous reports, interviews, and debates about the failed census ran during the following months. Some of the national newspapers headlined: the census is “the TranSantiago of Piñera" (El Mostrador, 2013c), "La Moneda [Government Palace] falls ’knock out’ with the death

17 TranSantiago was a massive urban transportation reform implemented in 2008 in the capital city, deemed as a policy failure.
certificate of the "best census in history" (Jimenez, 2013a). Likewise, the international press headed: “The failure of the best census of history” (BBC News, 2013b), “Chile may annul flawed census” (BBC News, 2013a), and “What is up with Latin American censuses? Chile may annul 2012 census after it skips 10% of population” (IBTimes, 2013).

Similarly, the voices in the country also harshly denounced what happened with the census; for example, an opinion leader commented, “Fatal perfection. What is the scope of this calamity? But how could anyone stop this narcissistic project?” (García-Huidobro, 2013); and similarly, important political figures pointed out, “The INE is lying” (Mayol & Azócar, 2013). Another politician declared, "The 2012 census became a big scam for our country" (El Observatodo, 2013). Thus, the census became associated with error, disaster, calamity, catastrophe, and failure. To Chileans, TranSantiago is synonymous with failure; therefore, as one interviewee said, “What was Piñera's failure? What was the TranSantiago of Piñera? The census was Piñera's TranSantiago.”

Given the census is the basis for the allocation and targeting of public funds (INE, 2018b), an inadequate characterization of the population has severe implications for the territory. One senator exemplified the seriousness of the problems in resource distribution, "the municipality of Maule has more than 40,000 inhabitants and since the results of the Census are not official, it will continue to receive resources for the 16,000 it had in 2002;” likewise, consequences for the voting system: “the Province of Cauquenes, which should have three regional councilors starting this year, will only have two because of the delay in the official information” (Senado Prensa, 2013b).

The director of CELADE at that time emphasized the role of the census for Chile and the risk of not having reliable and quality data, "If we go to the commune level, the
differences can be fierce: if one thinks about the implications, the transfer of financial resources to the communes, the population factor, and its characteristics are critical elements" (CIPER, 2014a). In addition, census data are critical to statistical production and the conformation of a "sampling frame" for household surveys, statistics, and population projections (INE, 2018b); therefore, the consequences of a bad census are severe, as stated by an INE manager, “if the census data are badly collected, it is a big problem and you have to go on for ten years with that. It's super serious.” Likewise, alluding to the importance of the problem, a statistician concluded:

This is only the tip of the iceberg and there are many errors to discover, mainly in the database [...] at this point, we have to swallow the sixty million dollars that cost the census and throw the data to the garbage (UV, 2013).

The Census Goes into the Trashcan

After the results of the inquiry commission, the inevitable questions were: was it not possible to find solutions? Is it possible that the entire census is useless? Political actors, the press, and experts began an endless debate on the pros and cons of "throwing the census into the trashcan," looking for ways to "fix the census" or “to rescue the census data.” The undersecretary of economy said: "I never thought that the conclusion of the Chilean commission would be to throw the data in the trash" (Pulso, 2013a). A census expert echoed that statement: "It is unthinkable to throw away the mass of data from the 2012 Census." (La Tercera, 2013c). Similarly, the president of the Chilean Statistics Society (SOCHE) said,

I refuse that this [the 2012 Census] has to be thrown away; it cannot be that because of one person or a group of people who did things so badly and who perhaps inadequately delivered the information and without the support of technical reports, it cannot be that all this effort does not work (La Segunda, 2013b).
Let us examine how the experts decided that the data was not suitable for use in public policy. Aware of the importance of the work of the commission for the country, the experts indeed faced a dilemma: to weigh whether it was possible to recover the census data. How reasonable was it to make specific use of the data? How feasible was it to correct some errors? The following quote from one of the members of the commission pointed to this dilemma and the challenges they faced:

The decision was not made in a single meeting; it was a much more complex conclusion because, look, in my opinion, first you had to understand if there was or was not a problem, then you had to measure the problem, that is, what are we talking about? It is a problem of such a size [small] or a bigger problem. And the essential question is: well, I have an aggregate of data that covers the vast majority of the population, beyond the omission rate that exists, how is that going to be useless?

Another member of the commission narrated how the five members concluded:

"When we reached that conclusion, that was a further conclusion, that was more radical; it was a conviction of the five. There was no discrepancy between us, of course, it was totally consensual." Likewise, another interviewee of the commission agreed with the above and pointed out:

We [the members] understood the census, we understood why what happened, happened, and then we quantified, and in the end, we realized, let's say, that it had abundant faults. But the final conclusion we reached was that the census did not meet minimum conditions to be a census of the quality we had had in Chile, which we defined at the very end.

A key element behind this critical conclusion—that the data was not usable for policy decisions—was that the commission realized the INE did not know (or they couldn’t find) the original databases of the census. The lack of backup mechanisms, the prevailing administrative disorder, the secretive situation in which the final analyses were carried out
(and the patchwork population estimates) all led to the original census databases to become lost, and all the databases were already modified. This is how one INE interviewee explained what happened with the database, “the problem was that the ‘zero’ database already has imputations. Many of the corrections they made, corrections in the good sense, that is, validations, were stepped on, that is, recorded over. You don't do that!” Likewise, one member of the inquiry commission clearly described this situation,

We didn't access the raw database! That is, what is presumed is that they [the INE] received a ‘raw’ database and in the disorder that existed, those who were making changes, they found an error, corrected it, but on the same database. There were many databases, there were databases that the computer group worked on, and there were other people who had worked with Labbé and those who had worked with Labbé and who had finally made the estimations.

**Blaming the Messengers**

The analysis of interviews, press, and documents shows another sharp criticism to the commission’s findings: a severe questioning of the skills and political independence of its members. Regarding the technical capabilities of the members of the commission, critics pointed out the following issues: the members were not experts in statistics but rather users of statistics for public policy, and only one of the members knew about census work since coming from CELADE, but despite this, neither was an expert in censuses.

Much in line with the saying, "blame the messenger and not the message," the members of the commission were subject to harsh criticism. The tone of the reproach was quite heated and the level of debate was considered by many as improper and even offensive, disqualifying the members’ professional expertise. The analysis of diverse sources shows that many of the criticisms pointed to the fact that there were no experts in censuses, and that the member who came from CELADE was “nothing more” than an international official.
(referring to an official from the UN organization, with all the bureaucratic duties that imply). An interviewee referred to the lack of expertise in censuses, “the mistake is to tell the fool that he is a strong man. Deep down, they do not know about census. They have never conducted a census.” Another interviewee emphatically countered these criticisms, stating that the person from CELADE was the coordinator of the Demography and Population Department for Latin America, and also worked with the support of that entire institution. In other words, CELADE’s whole team was analyzing data, running tests, and monitoring for information inconsistencies. Such were the arguments in defense of the attacks from an INE interviewee:

So, they say: ‘none of them knew anything about a census.' Lie! I mean, this person had experience in censuses already, but it is not just this person, because this person came with all CELADE behind them. When the commission reviewed the issues, they sent the databases, and they ran the analysis on the databases.

The absence of a statistician and someone with operational experience in censuses was another side of the criticism. One of the statisticians alluded that the initial composition of the commission did not include a statistician, “he [Coeymans] blundered by not having put any statistician on the commission. But he screwed up, and then, of course, he tried to fix it, but it was too late.” Likewise, another expert noted that the lack of statisticians in the commission prevented evaluation of the possibilities of data repair “just because a commission that has no statistician says that this cannot be fixed and you have to throw things away does not mean you cannot fix it, it means that the commission does not know how to fix it.”

Another line of major criticism concerned the lack of political independence of some of the commission members, recalling the charges of a political plot against the Piñera
census. For political actors and some interviewees, the commission was not politically neutral. Although two of the five members came from the government, the others possessed ideas closer to the left coalition (the former Concertación); one of them in particular, who was an academic at the University of Chile and during the inquiry process operated as spokesman, was perceived as the leader (and his surname identifies the commission). An INE professional referred to the political tone of the commission, "I think the commission also harbored a political bias, I could not tell you much how that happened, but it is like this, it's kind of weird;" moreover, another interviewee commented that the commission (which included a CELADE member) was politically influenced,

Look, there were also parts in which the CEPAL commission was very influenced … several people from the former Concertación that have friendships and relations with people of the commission. So, if I take the results of that commission, then, to me, they [the results] generate noise.

Reinforcing the previous ideas, the incoming economy minister declared that, from the beginning of the investigative process, he knew the investigation would not have favorable results because of the political leanings of their members,

This person [a commission member] is a weak person, who has worked in the University of Chile. I studied at the University of Chile, and there is an unfortunate conception in the faculty, ideologically quite powerful, so he would not be able to abstain from that. Also, the CEPAL, well … The CEPAL director, who hires everyone, is a lefty, undoubtedly.

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18 The University of Chile is one of the most important public universities in the country and the most influential in terms of public policies. The ideas of the University of Chile tend to be more liberal, secular, and in general, closer to the political left.
Accusations of political bias were considered offensive and painful for some members of the commission. Respondents emphasized the commission never had tones or political purposes, and even less, they never had an initial idea about the results they were getting. In one member’s words, “I feel that my participation in the commission was with my best available technical tools, and I did not see anything different in the people I had to work with. I did not see political discussions, none.” Along these lines, another member recalled how complicated their relationship was with the INE Director, and the idea of how he "repented" once he appointed the members of the commission:

Then he [Coeymans] appoints this commission, but after he calls the commission, he kind of repents, and he starts to say: it's that these, they're all from the left. Then he blocks our work… and blocks our work! So, the first thing was not to deliver the database [to us].

It is important to recall that when the commission was convened, the government authorities never thought that there were significant problems with the census and tended to put "cold cloth" on the census problem. Interviews conducted disclose that government authorities assumed the issues were only methodological, and specifically associated with the population estimation stage of the absent residents. In this way, while Alcérreca accusation pointed to a lack of transparency in how this estimate was made, in general, most of the actors thought it was something possible to fix.

Government statements showed the idea of a failed census was never an option for the authorities. The Minister of Economy noted: "the only thing that has happened here is a methodology discussion. Problems have arisen only at the stage of data conciliation" (Cooperativa, 2013b). Another government authority claimed, “there may be methodological doubts about issues, for example, such as absent dwellers or adjustments for new housing,
but that does not call into question this census and the data collection" (La Tercera, 2013b).
Likewise, the Undersecretary of Economy, when asked about the possibility of a new census, responded, "that event is already ruled out [a new census]. We have 15,810,000 legit census cards with their own backups. They opened the door for us and the pollster filled in the information sheet" (Cooperativa, 2013d).

It is noteworthy that at the same time that allegations were reported in the press, the government coalition was enduring a critical crisis of political leadership. The presidential candidate of the government coalition, Laurence Golborne abandoned the race due to serious questioning about his statement of assets, and so, Pablo Longueira, who was the economy minister (the government agency upon which the INE depends), rose as the new presidential candidate, all in the midst of INE crisis (La Tercera, 2013a). These shifts within the ministry coincided with the appointment of the new director of the INE, the formation of the commission of experts, and other measures taken to contain the emergency.

Interviewees agreed that minister Longueira did not get involved in the INE matters and declared he never really knew of the numerous problems at the INE and the census. The highly political profile of Longueira and the imminent promulgation of his presidential campaign kept him away from INE’s issues, and his exit from the ministry was a strategy to shield him from the INE crisis. With no minister in charge, Undersecretary Flores was the person who finally managed the INE crisis. He declared his intent: "I want to put my academic career at the service of this task so that Chileans have confidence that the data we are going to publish is true" (La Tercera, 2013a). However, the lack of strong political leadership and the bad decisions made were a breeding ground for more problems. In the words of one INE interviewee, "and the mistake came in some way, from Tomás Flores for
having made bad decisions. Longueira was ‘in another world,’ so Longueira never got involved. Yes, because he trusted Tomás Flores, and they were wrong.”

Thus, the Director, Juan Eduardo Coeymans, assumed office amid a political crisis, with very little information about what had happened with the census, but with a clear political goal: to solve the INE crisis, and thereby to save the census. Along these lines, and given the political guidelines, for Coeymans, the national experts’ investigation should have supported the future task to repair the census. The following statement made by the Director showed the initial expectations for the work of the commission:

They are going to help the INE analyze the proposal of how we are going to process the figures, if the controls that we will use are correct, how the data will be presented, [as well as] validate the process of estimating the inhabitants in the homes with absent residents [...] I trust that we will reach a Census that will be credible for everyone (E&N, 2013b).

However, similar to prior work of national committees of experts for other relevant policy matters, the experts had a mandate: to evaluate the census quality, thoroughly and independently. As stated by one of the members, “we were invited by the INE Director, but we were an independent, autonomous commission.” Another member, stressed the idea that they had no prior impression about the results: “We did not enter at all with an ex-ante perception of what was going to be the result of our investigation, we had a clean slate.”

Some interviewees pointed out that Director Coeymans always thought the census problems were not so serious, and therefore, he believed the investigation would confirm that idea. As one INE interviewee put it, "Coeymans was sure the commission, at the end of the day, was going to have endless more positive results." These differences in expectations, combined with the new INE Director's personality, caused complications for the experts in
maintaining independence. Some respondents observed that Director Coeymans tried to patrol or influence the work of the commission, that is, give indications about the type of analysis to be carried out or expected results, as stated by an INE official,

They [the government] imposed the commission on him [Coeymans]. But he tried to do what he should never have done, which is ‘set the tone’ … Of course: “Do this, investigate this,” or saying, “well, this thing about what Labbé did makes sense, right?” Something like that!

This pressure generated conflicts between the commission and the Director, tensions so great that finally the experts decided to take action, for example, not to assemble at INE’s offices or even to present the inquiry results at the university and not at the INE. Regarding the latter, the presentation of the results, the Director Coeymans commented, “this whole issue was set-up; the issue that they [the commission] want is to have a political picnic, that is, bad intentions.”

There are different interpretations of what happened between the Director and the commission of experts. For the Director, the political stance and the prior biases of the commission prevail—in his words, "I have a terrible opinion of that commission that I named"—while for the members of the commission, they took measures to ensure the technical independence given the pressure exerted by the Director himself.

The paradox of this situation is that Coeymans himself (with the support of other government authorities) chose and convened each commission member. Therefore, all criticisms of the composition of the commission, its political tenor, or the type of analysis performed were poorly received by most stakeholders. In this regard, one member described the situation: “so, in reality, you form a commission, you choose the members, and then you let them work. You don’t want to handle them like puppets, right?” Another INE interviewee
referred to the special animosity of the Director toward one of the members, “it was himself [Coeymans] who summoned him [a member]; therefore, it seems strange to me that there was a subsequent doubt, if, anyway, this person didn’t propose himself for the commission, but was recommended.”

**Second Opinion**

After the report of the national experts, the political pressure and the technical debate were more intense. Despite the President’s public apologies for the errors, and the resignation of the INE Director and all his advisors (CIPER, 2013c; El Mostrador, 2013b), the government was still defending the quality of the information gathered. All of this added to the criticism, raised by the authorities and some experts, of the capacities and political independence of the members of the experts commission, pushing the INE Director to look for a "second opinion." Using a medical analogy, the Director explained the need for this second opinion: “If you are told by a doctor to amputate your leg because of a tumor, do you amputate your leg or ask for a second opinion? What is responsible or common sense is to consult a second opinion” (AmericaEconomía, 2013a). Similarly, but alluding to the enormous amount of resources invested in the census, the incoming Minister of Economy, Felix de Vicente, commented:

> Because when a country invests US$60 million in a questioned project, it must have two evaluations to make the best decision about what to do with that project, with its conclusions, with the data obtained. It was prudent to go to a second consultation, and even more so after receiving the report of the national commission (La Tercera, 2013d).

Thus, the government announced the hiring of international consultants to compile a second report. The Director Coeymans, explained the need for this second assessment:
If they [the experts] ratify the census must be dropped, that is what I am going to report and that is what I will do. If they say, 'here is an alternative to repair it,' which may be the same as or different from what we have thought, well, we are going to follow their advice, because they are much more adept at that kind of thing than people we have today in the INE (Radio ADN, 2013).

Initially, the INE Director announced that the second evaluation of the census would be carried out by the European Union Statistical Office (Eurostat) or the World Bank, an announcement disseminated throughout the press (AmericaEconomía, 2013b; CIPER, 2013e), but days later was denied. There were annoyance and suspicion among political actors about the seriousness of this second assessment, in the words of a senator,

How is it possible that the government announces the arrival of a mission to analyze the 2012 Census and then we learn from the press that this is not true? We are facing a problem of unsuspected magnitude and we need to know whether or not institutions with international prestige will endorse this second opinion as we were told, or are mere independent consultants. Are we going to continue delaying a solution? […] This is not an academic problem, it is a country problem and we can no longer wait for a second opinion, especially after the WorldBank made it clear that it will not be part of this process (Senado Prensa, 2013b).

The international agencies did not agree to carry out the assessment, and the government ended up hiring independent consultants recommended by Eurostat. Ultimately, the commission of international experts was composed of Griffith Feeney, Roberto Bianchini, and Rajendra Singh19. They were hired directly by the INE Director and supported

19 Feeney is a US consultor and Ph.D. Demography, Bianchini is an Italian researcher on population studies and Ph.D. in Environmental Technologies Appropriate to Development, and Singh is an Indian census consultor and Ph.D. in Statistics.
by the INE with the information they needed. They worked independently for almost three months in Santiago. Although, they did conduct visits in two regions of the country, unlike the previous commission, these consultants did not meet with the census team or other INE managers or calculated the census's omission rate. Finally, they identified problematic issues in the enumeration and specifically recommended not using the data obtained from the imputation of unobserved homes—precisely the process of data imputation that originated the disputes—they nonetheless considered the quality of the data as suitable for general public purposes (Feeney et al., 2013), and concluded:

We find that the percentage of missing data for most variables of the questionnaire is low. The rate of ‘no response’ of the occupied and the percentage of vacant homes are not far from the experience of other countries. Countries with similar rates of no-response in their census use the data (p. 6).

How could one group of experts recommend repeating the census, and other experts say that it was good or acceptable? While some considered the census a failure, others called it—literally—a success, as it happened at a press conference, where the commission coordinator Feeney said: "This Census was not a failure, it was a success. I am going to give a B+ to this Census" (Cooperativa, 2013f). As expected, the overwhelming differences between the reports generated new controversy over technical, political, and timing issues.

The investigation results raised concerns—among political and technical actors, as well as public opinion—regarding commission' technical and political independence. Unlike the previous commission, the consultants were hired, and under the clear mandate to "save the census." Moreover, the favorable results to the government raised suspicions about the objectivity of the group of experts. In the words of one senator, “there is no data in this report that details how much population was counted, and curiously the expert judgments coincide
with Mr. Coeymans when he hired them and made it explicit to the public." In addition, the amount paid to international consultants amounted to US$180,000 (El Mercurio, 2013). The following quote from an INE official, explained the skeptical view to this second assessment, paid by the government:

The second commission did not make a dent–said in a simple and direct way. It did not make a dent. I also think there’s another logic behind it: the first ones were free, and the government paid the second ones. Thus, it [the investigation process] could be completely transparent, but in the end, how ordinary people perceived, guess who wins?

Secondly, this commission didn't calculate the census coverage or any omission rate that would account for the quality of the census. They didn't calculate under the argument of the lack of quality certification of the country’s vital statistics (live births, deaths, fetal deaths, marriages, and divorces). The consulting report argued the following:

So far as we have been able to determine, no evaluation study providing an estimate of the level of completeness of birth and death data between 2002 and 2012 is available […] Lacking the requisite evaluation of data quality, therefore, these estimates do not, based on international recommendations, provide a statistically sound basis for estimating 2012 census omissions (Feeney et al., 2013, p. 49).

Demographers and statisticians and INE employees considered this argument extremely odd since it underestimated the Chilean statistics and with that, the consultants evaded the critical issue of the omission rate (DF, 2013; Pulso, 2013b). The reactions came quickly; for example, an expert expressed distrust about this decision: “they ranted against the vital statistics of Chile, that is something very odd.” Another academic pointed out, “I believe that the vital statistics are very good, in Chile nobody buries the dead without declaring them in the civil registry. There are no births as clandestine, you know?”
Consequently, reacting to these statements, experts from different areas and INE officials reacted passionately to the scorn of the quality of vital statistics. Below, an interview excerpt detail this discomfort and disagreement:

They lack knowledge! Do they have any idea what vital statistics are in Chile? Where did they get all this? They didn’t check. Are they saying they couldn’t contrast with vital statistics because they don't know their quality? What are they talking about? Have they looked at the reports? We have medals; we have international recognition for the vital statistics of the country. [...] And that is the big shit that the international commission left: they did not use the vital statistics [...] our vitals were with no registered children or registered deaths, and in Chile, those things are impeccably good. I mean, it is one of the best, and probably the best in Latin America, cachai?

The experts interviewed for the study rejected that the consultants did not calculate any census coverage rate. That’s why the vast majority of respondents, regardless of their positions on the census failure, its political stance or their expertise, distrusted the international commission and its results. Another interviewee expert explained this matter:

What I think of commission two: it was a disgrace [...] because the measure of the quality of a census is the estimate of coverage. But, to not calculate the estimation? I swear to you that when I read that report, I said: No! Not doing it is super irresponsible.

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20 Regarding the quality statistics, UN confirms that Chilean vital statistics are among the best in the region, with a very low late birth registration rate (1.5%), as well as low under-registration death rates (0.5%); rates in the range of developed counties that confirm the good quality (CEPAL, 2014). Thus, the UN points out that in Chile, "the vital statistics system of this country is characterized by continuity, permanence and enforceability, according to the recommendations of the United Nations" (CEPAL, 2014, p. 78). Furthermore, Chile is the only country in Latin America to meet quality standards to be part of the Human Mortality Database—developed by the University of Berkeley and the Max Plank Institute—containing mortality data from only 40 countries in the world (HMD, 2019).
On the question of why the international consultants did not calculate the number of Chilean censed and the omission rate, they responded: "this was not exactly our objective, our objective was to evaluate the 2012 Population Census, to help, as much as possible" (Cooperativa, 2013f). And they added, "We believe that this is an operation that must be decided by the INE, we believe that it is not a topic for foreigners like us" (Cooperativa, 2013f).

Another element that generated annoyance among Chileans was the comparison with censuses from underdeveloped countries. The commission noted that other countries had validated censuses with more significant problems. However, Chileans aspired to OECD\textsuperscript{21} Standards, so the comparison was considered kind of offensive and showed the consultants didn't grasp the Chilean demands. As expressed by statisticians, "It should be noted that international experts have particular experience with African countries, so the quality criterion does not seem to be very demanding" (Del Pino & Jara, 2013). Similarly, alluding to the reaction of the statistics community, another interviewee noted, “that was a very weak report, all the statisticians who read it said no! That report did not have any firmness […] so basically, the report fell on its own.” Likewise, an INE high official explained why the country didn't consider the consultants' work:

I do not know technically what they [the consultants] would have been like. When you looked at the CVs, they were always advisors from African countries. And, after all, considering the process of Chile's entry into the OECD, the only country

\textsuperscript{21} Chile became a member of the Organization for Economic Co-operation and Development in 2010; it was the first South American country, and the second Latin American country after Mexico. Colombia became a member in 2018, and negotiations are underway for Costa Rica (OECD, 2019).
comparable to us is South Africa. So all the other countries were not comparable to us, which makes me think that, technically, they were not very good. Because when you do a consultancy to a country, you observe the context of the country, who it is, what they are, how they have moved in the last ten years, including the governments they’ve had, because you realize some are more technocratic, less technocratic, etc.

Another element that influenced the reception of the second investigation results was the timing and the political context. Concerning timing, the first commission was the one that set the tone, followed by the President's apology, so, despite efforts to save the census, the results of the first commission framed the subsequent conversation and thus set the political agenda. In one interviewee’s words, "they [the first commission] won the public opinion, they delivered the first ‘combo,’ without a doubt, and that carried forward in the discussion." Also, the second commission report came to light in November 2013, just days before the presidential election. Thus, the favorable results were interpreted as a political maneuver to save the Piñera census.

These commissions were not the only investigations into the 2012 census. Parallel to the inquiry of the first and second commission, administrative, judicial, and political inquiries were also carried out (detailed in the subsection to follow); all this slowly reaffirmed the ideas of irregularities, errors, and therefore, resulted in a loss of confidence. In short, the Chileans had already grasped the inadequacy of their census. Despite recommendations given by the second commission or the endless debate between authorities and experts, the concept of failure was installed.

The Failure or Not: The Never-ending Investigative Processes

The discussion about whether the census was a failure or not, what is involved in a failure, the quality of the data, and who is responsible, somehow is still ongoing today in
Chile. In addition to the commissions’ investigations, by the national and international experts, once the controversy was uncovered, several other inquiries were conducted to evaluate the 2012 census appropriateness; the most important were: i) The chamber of deputies special’ commission of inquiry, which focuses on political responsibility and irregularities of the census process (Cámara de Diputados, 2014); ii) The INE technical audits of the process of recruitment, training, and payment to census workers (INE, 2015), and audit regarding the technical quality of the census data (INE, 2014b); iii) The General Comptroller audit about the legality and administrative appropriateness of the census, including integral audits to the INE (CGR, 2014, 2015b) and special audit to the census (CGR, 2015b); iv) The Council for the Defense of the State (CDE) and Prosecutor office investigations about possible crimes committed. Below is presented the discussion of these investigations.

In parallel with the national experts' investigation, the chamber of deputies also initiated their investigative process, which considered the analysis of information and special hearings to those in charge of running the 2012 census. This investigation focused on administrative irregularities, manipulation and delivery of census results, and other issues related to the management of the Statistical Institution by the Labbé administration (Cámara de Diputados, 2014).

Interviewees observed the investigation process by the chamber of deputies had an eminently political character. The hearings and the inquiry process ended up deepening the differences that already existed. As one interviewee said, "when the issue moved to the Congress with this famous commission, which was a joke, it was a political commission, it was a fight between the two groups." A Labbé advisor commented on the hostile treatment he
received from the deputies, "they began to call me to the chamber of deputies, which was a circus, a true circus. I felt harassed, I mean, the tone of their questions!" So, too, an INE professional referred to the political nature of the investigation:

Then the circus came to the chamber of deputies, which I didn’t want to go to because I swear to you … it was a spectacle. It was such a terrible display. I really felt like I was in another world. They talked pure nonsense, and I didn’t know why they politicized the census there.

Concerning political responsibilities, there were two elements that the Chamber’s commission investigated in detail. The first was into those actors who knew the census data delivered to the public was incorrect (estimates to cover the census omissions, in a non-transparent procedure). Also, the inquiry confirmed that the chief of staff of the economy minister was alerted to the problems by INE officials, but he did not duly inform the minister (Cámara de Diputados, 2014).

The second set of inquiries focused on the director’s closest advisors. They were young people with no experience in statistics or public policies, salaries above their professional references, and a lot of power and influence at the INE and the census. For example, some of Labbé’s close advisors participated in meetings and significant decisions, but without having a formal position at the INE (BioBio, 2014). The investigation detected several administrative irregularities and practices that are at odds with ethics, some “triangulations” of money to pay salaries over what the Chilean public administration allows, and also specifically inquired into the leaking of confidential information (under statistical secrecy) that occurred under the Labbé administration (Cámara Noticias, 2013c; Radrigan, 2013). The inquiry also detected that Labbé hired a communication company without the appropriate public bidding process (Cámara de Diputados, 2014). All this investigation
happened with extensive press coverage and in a climate where accusations were being made rapidly. Thus, The Chamber placed the blame of the census failure mainly on Labbé, the INE Director. The final document concluded:

Given the establishment of a vertical administrational hierarchy within this institution, as well as the establishment of parallel administration structures, the former Director Labbé is responsible for not respecting the operation and structure of the Service, leaving aside the directing instances of communication that probably would have allowed identifying the difficulties generated in the Census process (Cámara de Diputados, 2014 p.203)

The chamber of deputies’ report also questioned the Director of the INE, Coeymans, for "having been erratic and unclear about the ways to remedy the problems identified" (CIPER, 2014b).

By that time, and following the international consultants' recommendations, the INE corrected and published the 2012 census data, and therefore, officially, data could be used with caution. However, the technical and political discussion about the scope and reliability of the 2012 data was far from closed. Thus, pending further clarity, most of public and private agencies continued to use the 2002 census data.

The year 2014 began with the new government of the center-left coalition under the presidency of Michelle Bachelet. One of the first measures taken by the also-incoming INE Director, Ximena Clark, was to order a technical audit of the 2012 census database to end the controversy and public confusion due to previous reports. This time, the INE itself carried out the inquiry and with a strictly technical focus on the quality of the data obtained (INE, 2014b). While the investigation progressed, the INE removed, for the second time, the census databases from the official website. In policymakers' eyes, not having publicly available census information was very strange: something that had never happened before, a bad sign.
Through the criteria of coverage, quality, and heterogeneity, the INE analysis confirmed the inadequacy of the data obtained. Thus, the audit (2014b) called attention to problems of traceability in the database, which was expressed in the inconsistency of the "no response," due to the lack of control in the enumeration or high volume of corrections in the questionnaire readings. Thus, "it is not possible to make a rigorous quality analysis based on the non-response, nor to know the magnitude of data loss in the survey, since the different versions of the database already have imputations incorporated with no record." Hence, the audit concluded that the data had shortcomings for constituent elements of a census, that is, information for public policies, updating of population projections, elaboration of the sampling frame, and information for smaller geographical areas. The final word: “data generated for the year 2012 do not meet the standards for this operation to be called a census" (INE, 2014b, p. 6).

Also, given the results of the previous investigative endeavors, in March 2014, members of the chamber of deputies requested the Comptroller General of the Republic give a detailed analysis of the administrative appropriateness of the census. The Comptroller is a highly respected independent body of the state that supervises state agencies in legal, accounting, and financial matters. The final audit report (2015) found several procedural and managerial errors, declaring many of the actions of the 2012 census as illegal or counter-regulatory. The report concluded:

22 The Comptroller General of the Republic is a higher and independent supervisory body of the state, which “oversees the legality of acts of the state administration and safeguards the correct use of public funds, independently of the executive branch and the national congress”(CGR, 2020).
The methodological change determined for the said survey [the census] was set apart from the international recommendations that the first precept requires carrying out pilot tests; careful planning of the process; having sufficient qualified personnel; and providing the necessary training (CGR, 2015b).

The idea of the illegality hit hard in the political debate and in public opinion due to the high respect for the resolutions of the Comptroller, where the administrative and legal requirements were central to the analysis, not politics. The inquiry results gave support to the criticisms of the validity of the census, generating a new wave of debate and accusations in this endless process of investigation. The following quote comes from a government spokesman, reacting to the results of the Comptroller's investigation: "they [the government] tried to sell us the idea that it was the best census in history. Yesterday it was confirmed that it is the worst in history" (El Dinamo, 2015).

The findings of these audits to the census process added to the irregularities already discovered in the functioning of the INE, detecting, for example, that the National Statistics Commission, INE’s supervisory body, did not meet during the Piñera administration nor approve the national statistical plan, thus contravening the law (CGR, 2014). All this led to sharpening the judgments on the disorder and lack of probity of the Labbé administration.

**The Final “Blame-game”**

Another of the investigative facets was the legal–penal responsibility. There were various questionings of the Labbé administration and the census, the significant amount of wasted public resources to modify the policy without proper analysis, the data manipulation through the housings’ “cloning,” imputation methods, the threat to statistical secrecy, and the misinformation delivered to the citizenship. Paradoxically, it was the government itself (first the undersecretary of economy and then the newcomer INE Director) who, in order to be
transparent and showing determination, started the judicial edge of the search for responsibilities before the prosecutor’s office (La Tercera, 2013b).

Later, with the explicit intent of avoiding impunity and doling out responsibility (Diario UChile, 2013c), representatives filed another lawsuit. As said by one representative, “here we are dealing with manipulation of data that can configure not only administrative sanctions but eventually crimes” (Cooperativa, 2013e). Furthermore, almost a year later, a new complaint was also filed by the Council for the Defense of the State, CDE—an appendage whose object is the legal defense of the interests of the State (CDE, 2020). With a focus on the falsification of data, the legal claim argued: “[Chileans] were induced by falsehood to believe that the data there consigned was actually counted, to hide or disguise the high rate of omission” (The Clinic, 2014a). Given those various complaints, the prosecutor’s office investigated the possible crimes of “falsification of a public instrument,” “embezzlement of public funds,” and “eventual violation of statistical confidentiality.”

Finding accountable and naming the former Director Francisco Labbé as the primary reliable was a process widely covered by the press, but particularly in the investigation carried out by the prosecution. Television and newspapers reported the seizure of INE Director’s computers by the police’s special unit, the interrogation of various officials during extended hours, and Labbé’s anguished statements in his defense. Moving from administrative and political inquiries to a criminal investigation generated a climate of concern and surprise. An advisor remembered the impact of that investigation: “When I saw the prosecutor’s office seizure, I thought I was dying … because I never imagined that this could involve crimes.” Likewise, Director Coeymans was shocked by the investigations: “Labbé may have made mistakes, but he is not a criminal” (Cooperativa, 2013c).
This examination took almost three years, and unlike the previous investigations, the prosecutor’s inquiry did not have conclusive results. The prosecutor’s office desisted further investigation, and so it concluded: “[although] there were serious administrative errors, both in the methodology and in the procedure applied, there was no crime” (Pulso, 2016a). From the legal point of view, a crime of adulteration of a public instrument could not be declared since the census was not defined as such. Thus, the former director Labbé and his advisors were not criminally sanctioned, which finally concluded the blame game, at least from the legal perspective.

5.4. Stage Four: The 2017 Census and INE Future Challenges

This last stage of the case points to the closing of the 2012 census disputes. Although the controversy over the failed census and the INE’s weaknesses continued for quite some time, the concluding milestone of the case was undoubtedly the new census of 2017 under the traditional de facto methodology. Furthermore, this final stage of the census case shows several advances and setbacks regarding the challenging INE strengthening process toward an integrated national statistical institutionality.

INE’s Quest to Get back on Its Feet

A few weeks after assuming office in 2014, and based on the importance of the census for the country and the unreliability of the data gathered, Michelle Bachelet announced a new census would take place in 2017. The also-new INE Director Ximena Clark emphasized the severity of the situation: “we have an emergency today: we need to collect this information as soon as possible […] we are going to apply a census with a reduced questionnaire which contains mainly demographic variables” (The Clinic, 2014b). In this
way, the INE followed the recommendation made by the first commission of experts about
the urgency of an abbreviated (shorter) census version. Moreover, the INE decided that the
new one would be de facto, that is, in a single day with volunteers censistas, in a clear move
to recover the statistical tradition. The new Director stressed this:

There is a long-term tradition in which the censuses have been carried out with high
participation of citizens, with volunteering that has summoned thousands of people,
and through this new process, we must reactivate and deepen that valuable capital of
our country (Minecon, 2015).

The preparation of the new census was extremely challenging for the INE. The
Institute was severely damaged by the internal conflicts, lack of guidance, and the loss of
reputation of the institution. As one INE manager pointed out, “the people who work at the
INE are the ones who got the most damaged with this because they continue to work until
today and they know that everyone is constantly looking at them questioningly.” Likewise,
another INE official stressed how unfair it was for INE workers bearing the burden of the
census failure, “there was enormous institutional damage here and it hurts me a lot. I want to
say please stop bothering and blaming the INE, the people of INE are hardworking people,
this is very unfair, they have had a terrible time.” Another INE worker mentioned the sadness
of being the object of ridicule, “If I go out into the street now and say I’m from the INE, ah,
then immediately the jokes start about the census: ‘Hey, how many Chileans are we?’” Along
the same lines, the INE officials’ union, ANFINE, expressed their annoyance,

The press has pointed out that census 2012 is useless. To say so seriously undermines
the honor of the officials who, with the usual vocation and conviction, were dedicated
to carrying out such a census for months, working from Monday to Sunday, without
additional remuneration but only compensated time (2014, p. 2).
Thus, the 2012 census conflicts left a deeply divided INE. Even today, interviews from the INE have opposing views on issues such as: the propriety of the public letter sent by the INE’s high executives about INE problems, the accusation of manipulation of data to the press, and especially over the conflicts and politicization that prevented further efforts to rescue the 2012 census data. INE officials and managers interviewed highlighted how damaged the working environment was at that time. A census team member recalled, “We were just doing things and all of a sudden, you see people crying… they felt mistreated, that is, the level of stress that this [the census] produced was huge, they divided, they accused each other, etc.” Likewise, a high INE executive commented on how profound were the wounds: “this wasn’t a typical fight between a couple of bosses, but it escalated very deep, very low in the INE. So, people were hurt by different things and wanted to be heard.” Thus, in a climate of helplessness and deep wounds the INE began the challenging task of “getting back on its feet,” viewing the new census as the opportunity to recover public confidence.

In addition to the census, INE faced several other challenges. At the end of 2015, another technical controversy broke out, but this time, the doubts were about the national employment survey figures. These figures differed from those reported by the University of Chile survey and heavily criticized by the Latin American Center for Economic and Social Policies (CLAPES UC, 2015), who observed survey weaknesses identifying people outside the labor force, leading to lower unemployment rates. What was initially a technical discussion then acquired a political tone; this is how a senator referred to the situation, “these figures are not real, and here there is some type of manipulation that makes these results not represent what is happening in reality” (Senado Prensa, 2015). This was the first questioning to the INE after the 2012 census, to which the INE Director reacted categorically: “Any
comment on possible manipulations of the figures or changes to the survey have no support, being merely inappropriate speculations and reckless for other purposes, which do not correspond to a rigorous technical analysis” (El Mostrador, 2015). It returned then to a strictly technical discussion on the survey’s ability—which recently had modifications—to gather particular labor market movements (El Libero, 2015). However, interviewees understood this controversy as an expression of the general mistrust towards the INE remained after the census crisis. Thus, defending the quality of the figures, a former Piñera government authority stated: “there may be a technical discussion of how a particular indicator is elaborated [...] but as long as the INE is not autonomous, it will always be the object of suspicion in each of the statistics it elaborates” (Pulso, 2015).

The INE Autonomy Bill

Another of the repercussions left by the failed 2012 census were the proposals to increase the INE’s autonomy and move toward an integrated national statistical system, which were met with intense debate. Since the first census disputes broke out authorities had submitted two bills, the first presented by President Piñera in 2012, and the second presented during the Bachelet administration in 2015. In the opinion of most of the interviewees for this dissertation, the first bill wasn’t a good project and therefore was never approved by the legislature (Cámara de Diputados, 2019; Senado, 2019). Alternatively, most of interviewees agree the second bill better reflects the concerns and debates on statistical institutionality.

All interviewees very much agreed on the importance of this law and, at the time of the fieldwork, they were enthusiastic about the INE’s future. Given the census crisis, the bill’s support was universal, and the first stages of the approval process of the law were fluid. For some respondents, the census crisis was a window of opportunity to place statistical
institutionality on the agenda, so said one interviewee: “I think that the INE, without this crisis, would never have achieved it, because it also ensured the bill was executed faster and taken seriously.” This bill advanced relatively fast until the end of 2017; however, because of the presidential elections, change of government and priorities, the bill made no progress because it did not have “urgency,” 23 and therefore the processing of the law paused.

The core of the bill is to provide the INE with the necessary autonomy and independence to ensure the technical quality of its products, separating it from political pressures and influences, thus preventing events like the 2012 census from happening again. As of writing (2020), the executive branch appoints INE Directors, which for different actors, makes the INE politically vulnerable; in the words of a CELADE authority, “it is unfortunate that an institute like the INE is subject to the government of the day” (CIPER, 2014a). For several interviewees, the statistical institutionality is at risk, and the census problems and other troubles (as the employment survey and CPI), were caused by this lack of independence. In the words of a former minister:

I also believe that if the INE had been autonomous, the criticisms for the difficulties of the census would have been more constructive than destructive, because it would have been a transversal institution owned by all Chileans and not as it is seen today: as the property of, and with the brand of a government (E&N, 2013a).

Interviewees remarked that the INE should be like the Central Bank, that is, technically rigorous and politically autonomous, as an interviewee pointed out: “The INE should be exactly the same as the Central Bank, which is the model. And there must be a

23 "Urgency" is a mechanism established in the Political Constitution that empowers the President to set the priority of bills in their legislative process to the National Congress. There are three categories: simple urgency, extreme urgency, and immediate discussion (Cámara de Diputados, 2020).
head, an executive director with a council, like the Central Bank, paid, well evaluated, elected.”

In the years of discussion for this law, the issue of autonomy or independence continues to be the point of significant debate. Although Piñera’s first law advocated broad autonomy for the INE, government officials have had more nuanced positions, as the Minister of Economy declared: “the INE should be autonomous, but responding to the country’s needs for data” (E&N, 2019b); similarly, a think tank legislative specialist recognized the merit of the independence criteria on the bill, but also argued: “It [the law] is not indispensable for the INE, which has all the technical capabilities to do its job well” (Pauta, 2018). On the other hand, a former INE Director also commented, “while the INE decides their products based on technical elements, the fact that every time there is a change of government the INE Director is changed, is the best proof that it is not technically independent” (Pauta, 2018); all of this continues in a back-and-forth debate while the law remains in Congress.

Another element that contributed to loss of support of the bill was the new regulation to the system of selection of senior public officials, SADP. In 2018, new legislation came into force, limiting the discretionary appointment of the first and second level of high authorities in the government hierarchy, by incorporating them in the SADP (Servicio Civil, 2020). Different actors valued the norm as an important step in overcoming discretionary authorities' appointments—such as the INE Director. However, the regulation contains an exception; the President is allowed to appoint 12 second-level authorities in strategic services during the three first months of its administration. Using this attribution, in his second
administration, President Sebastián Piñera named Guillermo Pattillo as INE Director (Estrategia, 2018).

**Census Preparation**

The 2017 census slogan was “we all count”\(^{24}\) in a clear gesture of recovering the collective sense of the de facto censuses and aligned with the idea of a citizen-based government of President Michelle Bachelet. As economy minister Céspedes stated: “the census does not belong to the INE, the census does not belong to the government, the census belongs to all Chileans and therefore we all have to work on it” (LT, 2015).

Those who participated in the preparation stage of the census commented on the enormous pressure they were under, because, as one INE officer mentioned: “we knew this was going to be the most-watched census in history, with no room for errors.” An expert also commented, “people were very expectant about what was going to happen with this census, all eyes were on the process.” Accordingly, the census became the INE’s top priority and all energies and capacities were at the disposal of the project, which meant, for example, census team had the best and most qualified professionals; the director Clark recalls how they strengthened the teams “in addition to the census team, we brought the best elements, the best professionals in each area to take care of this.”

They were few and intense years of planning for the census with several complications along the way. The most salient was the difficulty in keeping someone to lead the census project, which in the short period of preparation, had three different heads of the

\(^{24}\) “Todos contamos” is a Spanish game of words with several meanings: that we tell other people, that we are all counted by others, and also that everyone counts, in the sense that we all have worth.
The first head of census was Ninoska Damiánovic, former INE demography high official, advised by the eminence in censuses, Odette Tacla; both were key in detecting the imputation errors of the 2012 census and had a long career at the INE. For the academic community and the government, these experts’ presence provided warrants of serious and rigorous work. However, after just five months, they resigned due to profound differences in working styles with Director Clark, unleashing concern about the future of the abbreviated census (CNN Chile, 2014; Diario UChile, 2014; Lagos, 2014). After several months without census leadership, the engineer Patricia Morales assumed the role, but she didn’t last long in office either; both those within the INE and external actors disapproved of her because of her lack of census experience and her difficulties managing the scope of the undertaking. With less than a year to the census, Carolina Cavada, Director Clark’s closest advisor, finally claimed the census leadership (Pulso, 2016b). Interviewees agreed that Director Clark was heavily involved—overly involved for some—in census decisions. But, due to those several changes in the leadership of the project, she ultimately ended up being the actual head of the census.

After the 2012 failure, all eyes were on each one of the INE’s steps. Then, the INE faced the huge challenge to manage people’s expectations, as shown by numerous press headlines, television reports, expert interviews who filled the news and social media during those years, for example: “2017 Census: no margin for error” (Alonso & Lopez, 2017), “Nothing more political than the census” (Navia, 2017), “From 2012 failure to the April census” (El tipógrafo, 2017), “The census war” (Duran, 2017).

Undoubtedly, the primary concern of politicians and media was the recruitment of more than 500,000 volunteers needed, then the training and finally ensuring they would show
up to survey the census day. Concerned about the census arrangements, the special commission of the chamber of deputies summoned Director Clark to accountability for census preparations, contingency plans, and especially the process of recruiting volunteers (Cámara Noticias, 2017). Despite these worries, the number of volunteers reached more than needed, about 540,000 censistas (CNN Chile, 2017).

Another criticism of the 2017 census was the high cost compared to 2012, approximately 58% more expensive, without considering the productive losses given the census holiday (Concepción, 2017). As a former INE Director pointed out: “this census was very expensive and why did they do that? Because they couldn’t accept that they should have done a de jure census. So it’s clear the issue became politicized.” Another objection was the abbreviated nature of the census; instead of the 42 questions of 2012, this version only had 21, which led to criticism by minority groups, some politicians, and advocates of the 2012 census. For example, the lack of questions on disability, cohabitation of same-sex, religion, the commune of study, or work, among others, inspired disagreement (El Libero, 2017). Also, another point of criticism was that given the higher number of interviewers and shorter training, the quality of the data would be vastly inferior to the 2012 census. Following the words of an academic defender of the 2012 census criticizing the 2017 endeavor: “In restrictive economic circumstances, the country had the ‘luxury’ of carrying out the most expensive census in its history, with results that predict a worse quality than any of the previous censuses” (Araujo, 2017).

As noted, critics pointed to elements of census efficiency and effectiveness of the de facto strategy, such as the higher cost, better training, and better data, but this also reflected political and ideological positions on the census of the governments of Piñera and Bachelet.
(Navia, 2017). According to some interviewees, these criticisms were framed by the idea—from few politicians, academics and ex-INE authorities—that 2012 had quality data, and that INE authorities discarded it only for political reasons. However, most respondents understood these criticisms as an attempt to damage the 2017 census in a “political tie” strategy (BioBio, 2017). As stated by INE Director Clark, “from time to time, they have wanted so much to tie the previous census with this census, and Coeymans is one of those stubborn ones who wants to tie it, but I don’t know why.”

**The 2017 Census. The Expected Twist**

Finally, the 2017 census was carried out on April 19, with more than 500,000 volunteers surveying Chileans in their homes across the nation. Thus, infused with a democratic and citizen-led tone, the different actors agreed the process was a success. INE Director Clark remarked: “It has been an exemplary civic journey of which we all have to feel proud” (Emol, 2017b). The economy minister remarked, “This day allowed us to recover the confidence in the statistical institutions and to unite the people of the country. We were able to unite in a country project, in which, as we always said, we all count!” (Censo2017, 2017b). An INE Manager remembered the tenor of the process, “this republican feeling that when you see Boric [a congressman] as a pollster or President Bachelet surveying. That mystique made the difference!” Also, international observers valued the lessons of this census for the region, “in this case, it allows for feedback on censuses to be conducted in other Latin American and Caribbean countries” (INE Noticias, 2017). Likewise, the following quote from an expert interviewed expresses the civic feeling of collaboration:

In this context of distrust with institutions and politics, the census was like a balsam. It seems that we still live in a country where there are people in solidarity, who are willing to give their time for others; we are doing something together, all paddling to
the same side. And does the census produce all that? Yes! There are countries where it is not this way anymore, and they do not have this collective experience. It’s a lovely experience.

Social media also expressed this sense of citizenship; the following tweets illustrate the sentiment: “When Chileans unite, we are an insuperable force, a torrent of energy that moves the country. I am a volunteer for the 2017 census!” (Troncoso, 2017); “The 2017 Census was a success: this is confirmed by the opinions of experts, authorities, censistas and counted people” (Moreau, 2017); “2012 Census: professionalized, a fiasco. Census 2017: with public officials, volunteers and a republican sense, it worked” (Vidal, 2017). Along with feelings of civic pride and satisfaction for the task accomplished, interviews and public statements show the idea of revenge or rematch; after the “defeat” with the 2012 failure, the country was able to “win” this time. As stated by an interviewee,

I think it was good because we had to have a rematch and finish this. A political revenge, but it is also a revenge of the people, because the people wanted to respond well, wanted to show. [...] I think people felt like the census was out of line with what we usually do, therefore they wanted to say: ‘No. Look, no!’ Because the 2012 problem was a group of inept people who were not capable, but in Chile, we Chileans are good, we are the best in Latin America.

Interviewees assessed the census day positively, and so the media and social networks. However, the census was not exempt of problems such as: minor security issues, difficulty to access to some areas of the country, and mostly, complaints from unsurveyed people; as stated by an opinion piece: “there were areas with a surplus of census takers and others where they never arrived, leaving relevant neighborhoods without census” (Ruiz, 2017). Finally, as usually happened in de facto censuses, some households were not surveyed on the census day. Therefore, and consistent with planning, during a few days following the
census, the INE carried out a field operation to survey uncovered areas, and set up a web page for remaining families to answer the census online (PubliMetro, 2017).

In spite of valuing the feat of the citizenry that the 2017 census became, several specialists consider the de jure methodology a step backward. There are many risks in this strategy: recruiting enough volunteers (difficult in several areas), the potential of inclement weather, and, in general, focusing all efforts on a single day. Alluding to these risks, the chief of the 2017 census commented on events that happened in tandem with the census, “the day after the census, there was a flood in Santiago and closed schools in twenty communes, two or three days later there was an earthquake in Valparaíso. A single day is very risky!” Another expert emphasized: “everything happens in a single day, that’s madness itself.”

Likewise, the President of SOCHE said, “I tell you with all my heart I would do it again, but with my head, I would never do it again, that is, it really is a tremendous risk and also it doesn’t make sense to paralyze the country.”

Interviewees agreed that relying on volunteers is very fragile. Many factors can put at risk the attendance of volunteers, such as a rainy day or lack of motivation. For the 2017 census, several actors were concerned about whether the trained volunteers would finally show up on the census day, as an INE professional said: “the great doubt that everyone had was whether the volunteers would arrive, and what surprised everyone on the day of the census was that they arrived!” However, this shows that the census “depended heavily on the goodwill of people and institutions” (Ruiz, 2017). The majority of interviewees conclude that 2017 should be the last de jure census in Chile, since the success of the census should not depend on the mobilization of volunteers.
Was It a Good Census? Did We Learn?

Participants in the 2017 census recounted how previous errors served to prepare all edges of the 2017 census adequately. There were lessons learned in several areas; the most important were: in the internal organization of the INE to face the census, the collaboration and articulation with other actors, the training strategy, the supervision system, and the transparency of the whole process.

Thus, first learning for the INE was to re-emphasize technical issues and leave aside all kinds of political considerations on the census. The goal was to regain the prestige of the INE, and for that, the census became a top priority; and unlike the previous version, the entire INE, all units, were involved somehow in the project. Interviewees reported on the intensive work demanded the new endeavor, with regular meetings, close collaboration between departments, and in general, resuming work under an institutional structure with an evident technical seal. In the words of one INE manager,

We returned to having an internal institutionality! We returned to have a steering committee with clear roles; the technical issues were assumed by the technical Sub-directorate; the operations Sub-directorate carried the operations. We achieved the formation of a management team that did not exist.

According to INE managers and other experts interviewed, another lesson learned from the 2012 census mistakes was expert advice and collaboration. Therefore, by 2017, the INE set up an expert advisory committee, worked closely with CELADE, and emphasized relations with other agencies, both at central (other ministries) and local levels. A census team professional commented on the importance of resuming collaboration with the UN, “it was very important to talk with CELADE, because they know what has happened with censuses in other countries, and talked with other countries and asked them: ‘What
happened? What did they do?” The INE worked intensively to collaborate with different organizations, municipalities, NGOs, unions, the private sector, universities, and many other (Emol, 2017a). Interviewees stated that thanks to these efforts, the INE could attract volunteers, coordinate training, provide information, and persuade the population to participate actively in the census.

Unlike the 2012 census, the 2017 census developed a complex communication strategy with an emphasis on citizens and informational campaigns in line with an idea of public pedagogy; for example, the educational campaign starred by the famous puppets of “31 Minutos,” which placed a focus on recovering the census history, presenting the type of respondents and its particularities, the role of the censista, and presenting the survey’s questions (31 Minutos, 2017). Similarly, the 2012 version had several weaknesses in training, and for a de facto census, adequate preparation is even more critical, as it is for volunteers. Interviewees mentioned various efforts to ensure coverage and quality of the training process in the 2017 version, such as detailed manuals and support audiovisual systems (Censo2017, 2017a). In general, actors agreed they learned from past mistakes and had a favorable opinion of training achievements, as detailed by an INE professional,

There was a lot of learning. For example, about training too, that is, the mistakes that were made in training in 2012 were not made again here; maybe others, but not the same. There were many things known about what we have to be cautious about, because someone would say: ‘look out, this happened in 2012,’ and when, in addition they tell you: ‘and in 2002 we did this, then we already tested this, 2012 this,’ then little by little collecting the experience.

Along the same lines, census supervision was an especially weak point in 2012, so this time the INE designed an online supervision system that delivered information minute by minute and was used by several governmental agencies at different levels to verify progress,
identify areas that were lagging behind and to re-distribute censistas. Interviewees agreed the system was a significant contribution; a census team member pointed out: “for me, the best decision was the monitoring system that allowed us to know what was happening at each time of the census day. To identify each censista, all information online.” Similarly, the head of the population demography area of CELADE emphasized the usefulness of the system:

Ah, something I also want to highlight, because it was fantastic, was the monitoring and control system for the operation day. We visited the control center and it was very interesting because the INE had all the census takers’ registry online, very disaggregated. And then, on the census day, they had the previous registry, and then the verification of the registry at the time the census takers arrived at the census center.

Under the Chilean transparency law, each decision and policy step is public, and though, it can be subject to analysis, oversight, and criticism. Therefore, the last significant lesson was the importance of transparency in administrative processes, technical foundations, and through publicity of all information. Thus, the INE made substantial efforts to document the different stages of the census and its results adequately. In this regard, an INE official said: “there is tremendous learning from the 2012 census that also reaches other areas: the transparency. Census traceability, documentation, the decision-making; everything is clear and transparent.”

The census was during the Bachelet administration, but its results were available in Piñera’s second administration in 2018. Guillermo Pattillo, the new INE Director, appointed by Piñera, delivered and validated the census results, ultimately dismissing the insistent criticisms and legitimizing the INE’s work. Without any mention of the 2012 census data and with a strictly technical tone, the presentation of results focused on census results only, such as: the low fertility rate, the greater economic well-being of Chileans, highest levels of
education attained, and the growing presence of immigrants in the country (INE, 2018a). The academic community appreciated that Director Pattillo endorsed 2017 census results, thus closing the 2012 controversy. An expert from the 2012 national inquiry commission applauded the INE Director, “[he] has made the right decision to reinforce the ongoing process and no longer confuse public opinion by trying to resurrect a Census that did not have adequate quality standards” (CNN Chile, 2018). Likewise, a renowned analyst praised the tone of the presentation of the results,

> With sober solemnity, the recently appointed INE director delivered the results last week. There is much to celebrate in this: the culmination of a formidable task, the effort of many and the participation of all. We can only congratulate the INE, the incoming and outgoing authorities who, as befits, have made the institutionality work; in this case, the statistical institutionality. For citizens, to applaud that we have an instrument that sheds light on who we are. But, above all, it reinforces confidence in the continuity and robustness of our public statistics (Méndez, 2018).

**The INE Beyond the Census**

INE interviewees acknowledged that the intensive work in 2017 bore fruit: the rescue of citizen values, reliable data for public policies, and recovery of the INE’s damaged reputation. However, these achievements also meant organizational costs. For a few years, INE’s main task was the census and only the census, and according to interviewees, the institution neglected other processes. The modernization and autonomy bill stagnated, and so did other internal improving processes. An INE manager referred to this: “the rigor of the census process was impeccable, and therefore, in superfine words, Ximena [INE Director] ‘exploited’ the INE, pushed it to the limit.” Referring to the idea of an abandoned INE, another public official claimed: “What a pity, five years passed, a lot of time passed and nothing to strengthen the institution [...] It’s like forgetting what happened, covering it up and
doing a new census. Hey, actually, an institution doesn’t learn that way!” Thus, unfortunately, recovering the census policy did not necessarily mean strengthening the organization. The INE still holds a pending debt.

This sense of achievement by the 2017 census contrasts with the INE’s internal organizational climate. Interviewees from the INE and other INE-related agencies agreed about the problematic working environment. The intense effort to perform the 2012 census, the difficult relationship with INE Directors, the subsequent inquiry and audits, and especially the damage to the institution’s reputation, strongly affected public officials’ self-esteem and left an increasingly deteriorated working climate—confirmed by organizational climate studies conducted in 2015 and 2017 (Pulso, 2018a). During the Clark administration, the INE National Association of Officials (ANFINE) made some complaints about the lack of consideration of INE employees’ demands and opinions and unjustified firings. They even formally requested the incoming minister of economy to remove Director Clark, and admit the validity of the 2012 census data (ANFINE, 2014, 2017, 2018a, 2018b). However, these demands were not accepted by the Government.

At the end of 2018, on the occasion of the annual monetary policy report, the Central Bank seriously questioned the INE’s employment figures, due to the underestimation of the contribution to employment of the significant recent immigration, which the surveys did not capture (Banco Central, 2018). However, the report exempted INE from responsibility, “we [Central Bank] are not criticizing either employment surveys or the INE. What we are saying is that given that they [INE] cannot capture a shock that was totally surprising, they should rely on other sources of information” (Pulso, 2018b). Thus, once again, the INE’s technical
capacity was called into question. Later, the INE Director acknowledged the survey’s weaknesses and assured future improvements (Emol, 2019; E&N, 2019a).

However, the questioning of the INE continued. Starting the 2019, another polemic aroused, and this time regarding the CPI figures. Unlike previous episodes, the new INE internal audit unit – created by the INE Director – detected a few inconsistencies in the clothing item of the index, but as with other episodes in the past, the crisis was framed as “manipulation of figures” (INE Noticias, 2019a). With this, another scandal broke out, the INE reviewed and corrected the numbers, the chamber of deputies began another special inquiry, and the newspapers headlined, "A crisis that recalls the 'best census in history'" (DF, 2019).

The year 2020 was not without controversy, either. With a new error in the CPI figures, this time with electricity prices, issue that triggered Director Pattillo's resignation (DF, 2020). Evidencing the seriousness of this new situation, the Economy Minister Lucas Palacios pointed out, “It is not about sweeping the garbage under the carpet; it is about showing it and generating concrete actions to solve the problems.” (El Mercurio, 2020).

Additionally, the national association of INE public officials declared, “We are facing a complete failure of a ‘managerialist’ and decontextualized vision of the technical nature of the statistical institution” (ANFINE, 2020, p. 2). Each of these episodes put the INE once again in the limelight, with its reputation in doubt. Also, each polemic reinvigorated the public debate over the strengthening and INE independence, and the government’s commitment to reactivate the bill that waits in Congress (Pauta, 2019; T13, 2020).
Next Step: The 2022 Census

Given the risk of the de facto method and consistent with the trend of the region, most interviewees agreed that the appropriate methodology for 2022 is the de jure census. However, many were enthusiastic about the citizen feat of 2017 and the power of the country’s republican tradition. A census team manager pointed out, “there are people who proposed that the next census could be again with volunteers, because social cohesion and the celebration of citizen participation, but I think it is super difficult to call volunteers.” Former INE Director Clark also promotes the de jure format for the 2022 census, “in one day it’s like laying all your eggs in one basket, in one day if something severe happens you have no way to deal with it.”

Conversely, some interviewed have a different take on census methodology. In the words of an international census specialist, “my colleagues are very supportive of the de jure censuses, I’m not so much, I’m not so dogmatic, because I think it depends on each country’s socio-historical context and data needs.” Therefore, the country’s idiosyncrasy is a critical factor for the census success, as described by the following lines of an expert,

If public trust is in a de facto census –and well, public trust is a primary variable in operations of this type– then if people don’t believe and there is no cultural change and communication policy to generate trust around the new census, jumping into the de jure census can be more dangerous.

Despite preferences and opinions about different approaches, the INE announced that the 2022 census will be conducted under the de jure methodology (Pulso, 2020). However, beyond de jure or de facto, the debate over census data increasingly points to the importance of using administrative records to complement or replace census information. Acknowledging the good quality of Chilean administrative registries and following
developed country practices, several interviewees believe Chile should shift toward better data integration and not rely only on the census. This is what an INE high official said: “As a State, we have to be capable of incorporating administrative data. It is a conversation of administrative records that allow you to build census variables, and crosscheck them, and validate them.” However, the coordination and use of data between Chilean agencies still depend on the approval of the bill, as stated by an ex-INE Director: “within the areas of improvement, one of the matters is to someday be able to use the administrative records finally, but for that you need to have access to them, and that requires a legal change.”

Given the urgency of having data, the 2017 census was abbreviated, with only 21 questions. Thus, there are many unexplored topics since the 2002 census, and therefore also many expectations regarding what should be asked in the first full version in 20 years. With only two years before the next census, preparations are already underway, considering for example, the participation process with citizen organizations and public agencies regarding information needs for the design of the 2022 census questionnaire (INE Noticias, 2019c, 2019d). Also, it is already clear that the census will have technical support from CELADE, as commented by a UN officer interviewed: “they want our support, because they want to make things right, because it wasn’t the methodology that failed, what failed was preparation. So they want to prepare well, and they are on time to do so.”

The census failure deeply disturbed politicians, public officials, the media and the citizenship, and the effects of the failure are still very much present on some debates and projects such as: the strengthening and modernization process of the INE, the discussion of the statistical modernization and autonomy bill, expectations about the next census. Thus, the INE faces the enormous challenge to overcome the wounds of the 2012 failure and move
toward a statistical institutionality in line with Chileans’ expectations. With the announcement of the next census in de jure mode, the unresolved status of the INE's institutionality bill, and recurring concerns about the quality of INE's work, here concludes – for the purposes of this dissertation – the narrative of the 2012 census failure in Chile.

Supported by diverse secondary sources and especially by the protagonists' voices, this chapter provided a rich and detailed narrative of the census case in four moments or stages. The case description offered valuable information about the actors, its opinion and perceptions, the census policy and decision-making, the organizations involved and their dynamics, as well as the social, cultural, and political circumstances under which the census events were deployed. Therefore, and following the Lenses Framework, this description is at the service of the different analyses presented in the following chapters.

Diagram N.8 below temporarily locates the most significant events of the case from 2010 to 2019. Besides, the diagram observes those years where many events occur and other years with fewer relevant events linked to the census case, which is represented by the size of the circles in the timeline. Complementary to this, Appendix N.5 provides a brief description of the most important events of the case from 2010 to 2019.
Diagram N.8. Milestones and Relevant Events of the Case of the 2012 Census in Chile
Based on the case narrated in Chapter Five, this section analyzes the case of the 2012 census failure through the policy lens. Relying on the literature on policy analysis, public policy research, implementation and evaluation, this lens takes as its purview the census and the elements that lead to failure. In this way, the policy lens considers the census policy as a unit of analysis and interrogates it from different concepts and distinctions from literature.

According to the policy cycle framework and its stages—problem identification and agenda-setting, formulation, adoption, implementation, and evaluation (Jann & Wegrich, 2007; Birkland, 2014)—a census is a very particular policy. Unlike other policies, for a census, the identification of the problem at the policy formulation stage is less relevant in the policy process. The foundations of running a census and the goals to achieve are well-defined. Different actors agree upon the significance to enumerate and characterize the population, and following the international conventions and internal laws, it is mandatory to run censuses at least every ten years. Therefore, the census policy process emphasizes other elements of the policy cycle such as the specific design of the policy, the implementation, and subsequent evaluation. Based on the abundant evidence gathered in this study, the policy lens allows identifying several weaknesses in the 2012 census formulation, especially the abrupt change in the census strategy and limited time for planning and proper adaptations. It also delves into the main difficulties in implementing the census, including recruitment,
training of pollsters, supervision, and administrative support processes. Finally, regarding evaluation, this lens investigates the controversy of the numerous evaluations of the 2012 census, the criteria used, and the actors and their different perceptions. Appendix N.4 presents maps of themes and codes for each one of the four policy stages of problem identification and agenda-setting, formulation, implementation and evaluation.

6.1. Policy Formulation

Chile was one of the first Latin American countries to systematize population counts. Records show that the first population counts in Chile were in 1812–1813, and the first official census was carried out in 1835; also, that same year, the country's statistical office was born, which later would constitute the National Institute of Statistics, INE. Thus, with only a few exceptions (1854, 1905), the censuses in Chile have been carried out successfully every ten years (INE, 2009; Memoria Chilena, 2019). Until 1940 censuses were only population counts, but since 1952 and in line with international trends, the counts in Chile are censuses of population and housing (INE, 2020). Population and housing censuses preceding the 2012 census were conducted under the de facto modality, and although countries in the Latin American region had already moved toward the de jure strategy, until September of 2011 the 2012 Chilean census was prepared under the traditional de facto approach.

Depending on the literature, the selection of alternatives and decisions on the specific policy design is a particular phase of the policymaking process. This stage is labeled, alternatively, policy proposals (Dunn, 2004), policy adoption (Anderson, 2014), or policy formulation (Gupta, 2011; Jordan & Turnpenny, 2015), as well as a critical piece at the implementation stage (Mazmanian & Sabatier, 1983). Whether the policy's design is
understood as the last step of policy formulation or the beginning of the implementation process, the analysis of the diverse information gathered revealed that the decision-making process regarding the 2012 census was far from meeting the minimum standards of quality. Some of the main elements concerning the formulation phase that contributed to the census's failure are analyzed below.

The first element points to the abruptness of the decision, the lack of time. Given the pressures of the student movement, the sensitive political climate of 2011, and the potential threat to the de facto census under preparation, the INE modified the census design just a few months before starting the population count. Although the decision was made in a few days and authorities did not communicate it transparently, the consequences were enormous. The need for more time for an adequate methodological change was not considered. For the vast majority of interviewees, the lack of time was the main reason for the failure. The INE Director Clark explained the importance of time: “censuses, normally worked with years of preparation, never less than three years, can be around four, five years at times, but six months is too narrow a period to adjust something as fundamental as the modality of a census” (El tipógrafo, 2015).

As described in the case, the challenge of change was overwhelming. In just a few months, the INE, and particularly the census team, had to modify the entire strategy, including enumeration logistics, recruiting of interviewers, training, supervision, questionnaires materials, and much more. In short, there was not enough time to adopt the new design and make the necessary transformations to ensure the proper development of the policy according to the new format. As stated by an expert from CELADE, “The logic of this census is very different, and also there was very little time to prepare if you consider all the
logistics and the conceptual challenge involved.” Likewise, another expert stated: “and the countries that have started this path [de jure census], some of them some time ago, use much more time for the preparation of the census” (E&N, 2013a).

This abrupt change contradicts international standards of UN and expert advice, which recommends great caution when making changes to census methodologies, especially those that require time and necessary testing; also, they insistently point out the complexity of censuses and the importance of proper preparation, “planning can be regarded as the core of the census phases and the processes that is most critical to the completion of a successful census” (UN, 2016, p. 9).

Another critical element was the basis for the decision. As stated in the case, the main reason for modifying the census strategy was the pressure of the student movement on Piñera’s government and the future census –by not having enough volunteer censistas or that the social movement could boycott the operation on census day. Therefore, the decision on changing the methodology—and also to not postpone the date—was undoubtedly a political decision. The political basis of the shift was widely disapproved by stakeholders, but especially by experts and statisticians, who, while understanding that there was an actual risk to the census run by volunteers, considered that the decision was not technically substantiated. Thus, the disputes over the grounds of the decision return to the classic debate about how to assess the feasibility of public policy (Meltsner, 1972; Majone, 1975) and the tension between the technical and the political (Heinelt, 2006).

It is essential to consider that the political pressure of the student social movement was very strong, and therefore the threat to the success of the census under preparation was real and not just a political maneuver. Hence, the de facto 2012 census, as a public policy,
was at risk at that time, and modifications and even a change in strategy seemed reasonable from a political and technical point of view. However, the INE authorities did not have the technical knowledge to make an adequately informed and rigorous decision about the census design. Accordingly, while the political grounds of the shift of census modality were substantial, the technical foundations were fragile. The following quote from the advisor of the INE Director at the time and part of the small group who made the decision corroborates the lack of technical foundations of the methodological change,

The decision was not technical; the decision was political and super irresponsible. [...] What antecedent did we have? Nothing! Just the marches in the streets. It was a super political analysis, or just a political one. Because we did not have any certainty, we did not have any information that told us the political risk was so significant as to change the methodology at that stage of the game. That is the issue, cachai?

Closely related to the above, another element that affected the decision on change and its characteristics was the lack of participation. The current political pressure and the INE Director's distrust of the INE professionals led to the decision on the change being taken “between four walls” by a small group of people, where the only person with any experience in censuses was the head of the census. While INE authorities held some consultations with experts and a few INE managers, those conversations were merely formal, as the decision on the change was already made.

Given the importance of the census for the country, and the high complexity of the proposed changes, it would have been preferred to consult experts, to analyze the de jure census implementation in other countries of the region, and thus, receive all necessary required support to achieve an adequate transition from the de facto census toward the de
jure. None of that happened, which shows the isolation of the INE authorities from the INE itself and also from other organizations and actors with statistical or census expertise.

Thus, the decision to change expresses the underestimation of the complexity of the census task. The initial formulation had embedded the simplistic idea that the most significant difference between de facto and de jure census was that the latter had more time to conduct the surveys in the territory. This consideration expresses how many policy edges were not weighed, not in logistics, resources, or the type of data collected. Thus, there was ignorance about the conceptual implications of this change, as one of the experts interviewed narrated,

This census not only changed the operations of how to do it, but the whole concept also changed, and nobody analyzed what this meant for population projections, what it meant for public policies. For example, for the allocation of communal funds, nobody examined in depth what it meant for the sampling frame and how to put it together when you have complicated situations, a lot of other implications were not seen, and that was because of the conceptual change.

Another essential element to understanding the decision on change and its context was the lack of leadership in census matters. During the preparation time, the 2012 census had six census leaders, each of whom had different perspectives to cope with the census, leading the census team, but with no clear or coherent direction. In the words of an INE official, “the INE was bouncing, and the census was bouncing and bouncing, as it assumed a person as a leader, then assumed another, then assumed another, then, in the end, you realized the census had no direction.” Another INE professional similarly pointed out, “[T]hen this census started limping from the moment you had many bosses with different visions, and with a team where the large part was new without experience in the census.”
Even before the modification of the methodology in 2011, there were critical technical arguments about the census within the INE, particularly on how much participation the census questionnaire should have, and how to achieve data transparency according to current times. However, and given the high turnover of census leaders, these demands did not come to fruition; the issues remained mostly unresolved, and by 2011 the 2012 census in its traditional method came with significant delays and ambiguities. This antecedent means that long before the change of strategy, the census already carried weaknesses in planning.

Regarding the census team, those professionals within the INE responsible for carrying out the census project, the team was very unstable over time and it lacked professionals with experience in census operations. Different interviewees stated that the census has never been a priority project for the INE (such as the CPI or employment surveys), so the census team was extremely marginal to the INE, and therefore never garnered the best professionals. So minor was the importance of the census unit within the INE that when an INE manager performed poorly, was politically conflictive, or had other problems, INE authorities transferred the professional to the census team. One INE manager referred to the lack of priority of the census unit: "Instead of saying that the census is the largest project and therefore I have the best people, there was the idea that those who are punished go to the census."

Thus, the high turnover of the head of the census, the lack of leadership in census matters, and the team’s overall weakness were fertile ground for a methodological change without significant opposition or adequate safeguards. The following quote from an INE professional shows the census team and INE professionals were not able to raise their voices and adequately give alerts about the technical risks on the strategy change:
I feel that there was a political decision to change the methodology for an obvious reason, but mainly the ‘Jiminy cricket’ [the alert] failed. I think someone should have raised their hand and warned: let's see, this is super complex, we are not prepared to do it, and if we are going to do it, we have to be careful with the omission rates.

Thus, there were several elements at the INE and in the census team that contributed to the difficulties of the census endeavor, but the decision to change the census strategy (and the characteristics of the decision) was a critical component toward the failure. However, the policy process is more complicated than the formulation. Thus, it may happen that even if the policy decision is suboptimal, the implementation can compensate for poor planning and policy design.

6.2. Policy Implementation

Following the heuristic of the policy cycle, once the decision has been made, the implementation process begins. The study of policy implementation began with the seminal work of Pressman and Wildavsky (1984), examining how great policy expectations are dashed in the complexity of implementation. From this perspective, the decision is only the trigger that initiates a complex process of implementation: “An authoritatively adopted policy is ‘only a collection of words’ prior to implementation. At most, it is a point of departure for bargaining among implementers” (Pressman & Wildavsky, 1984, p. 166).

Likewise, for Mazmanian and Sabatier (1983), implementation is “the carrying out of a basic policy decision, usually incorporated in a statute but which can also take the form of important executive orders or court decisions” (p. 20). Of the many contributions from the field of policy implementation, this study emphasizes the “top-down” implementation approach (Pülzl & Treib, 2006). The main element of the approach is the idea that the policy
is formulated at the “top” or the center of the government and then implemented by the agencies, with a clear separation between the formulation and the implementation stage of the policy process. It is a normative and hierarchical perspective, where the critical step is the proper and legitimate policy decision. Therefore, when the expected results are not achieved, it is understood that the policy fails, deviates from its initial mandate, or has suffered an “implementation deficit” (Hupe, 2011; Hupe et al., 2014).

The hierarchical normative implementation approach is reasonably straightforward to apply to the 2012 census case. The census policy had a clear, normative, and legitimate mandate, emanating from the national level, to enumerate and characterize the people living in Chile. There was a widespread consensus about the importance of the policy and a general knowledge about what the census implied in practice, which was a standard application of a questionnaire to households and families all over the country by a certified censista. Therefore, the census case evinced the significant separation between the formulation of the policy—with the decisions made by INE top authorities—and the implementation stage. The distance and lack of coherence between the policy idea and policy implementation are expressed in the absence of clarity of the means to fulfill the goals, the high expectations, the decreased commitment and support for the policy, lack of proper resources, and the inadequacy of controlling mechanisms, among other elements.

Thus, the implementation literature emphasizes that problems in public policy arise because the formulation stage does not foresee the numerous complexities of implementation, which was clearly observed in the census case and severely affected the progress of the census. Some of the unforeseen elements were the resignation and very high rotation of census takers, which led those in charge of the territory to dedicate a lot of time
and effort to replace censistas, not to mention increased recruiting and training. Reports show that only 73.62% of the censistas received complete training, the rest may have received partial or no training (INE, 2013b) Census recommendations, handbooks and specialized literature identify training as a critical element for a good census; therefore, that more than a quarter of the census takers were not properly trained was a determining factor in coverage problems and poor classification. Another unforeseen element is the limited and inadequate use of the census progress monitoring system, the CPCS. On the one hand, the problems during enumeration in the territory led to delays in the progress records, and on the other hand, supervisors and authorities did not make adequate use of the information available in the system to correct deficiencies in time.

The policy failure literature analyzes the role of decision makers and how their characteristics and behavior affect the policy. It states that many of the disasters are due not to the initial difficulties but to the actors' inability to deal with those problems during implementation, which eventually worsens and enlarges the problems. Similarly, Neupert (2017a, 2017b), in his work *The Fallacy of Planning* analyzes the difficulties of censuses in achieving the expected results. The author points to the existence of cognitive biases of those who run, plan, and operate censuses that lead to excessive optimism and then to making bad decisions. Thus, and referring to the Chilean census, Neupert points out that decision makers' cognitive biases led to ignoring warnings and countless available information that could help reduce difficulties: "alternative possibilities were not considered, despite the availability of manuals and experiences in other contexts" (2017a, p. 9).

In implementation research, it is commonly understood that some policy problems arise from an inadequate definition of the goals or the desired actions to achieve these goals
(Matland, 1995). For policy, it is not enough to declare and define the goals, but it is also necessary to structure the implementation process, that is, the mechanisms to accomplish those goals (Mazmanian & Sabatier, 1983). Given the limited time to re-make the entire census process according to the de jure methodology, the INE was unable to prepare for policy implementation, leading to a poorly-structured execution. Evidence of poor implementation provided in the case description include: the miscalculation of the number of enumerators required, ambiguities about the census workers’ job, training difficulties, and poor control, among others.

In line with the definition of objectives and their relationship with the implementation, Matland (1995) offers an interesting model to understand what happened in the implementation process according to two dimensions of the policy: ambiguity and conflict, presented in the Diagram N.9 below. Ambiguity indicates how well defined are the goals, means, and roles for the implementation, and conflict refers to the level of agreement and congruency of the goals between actors and organizations. Thus, low conflict and low ambiguity are characteristic of an administrative type of implementation, with clear and shared policy goals, and the resources and the proper mechanisms of compliance determine the results, which is consistent with the expectations from a policy such as a census. However, in the current case, given the lack of planning, the census case showed high ambiguity in implementation. Although the census goals appeared to be clear (to count and characterize the population), the evidence from the case shows that the necessary resources were not available and the means to achieve the goals were not clear enough for different actors (census team, experts, media, censistas, citizens). Thus, this lack of coherence was gradually revealed throughout the census enumeration.
Regarding conflict, contrary expectations concerning this type of structured and standardized policies, the change of strategy generated disagreements between actors, and distrust in citizenship. Therefore, this led to highly ambiguous implementation with significant degrees of conflict. Following Matland's model, when implementation presents both high ambiguity and high level of conflict, it is a symbolic type of implementation; typically this type of policy plays a role in confirming goals and reaffirming commitment to values and principles: “policies that invoke highly salient symbols often produce high levels of conflict even when the policy is vague” (1995, p. 168). Consequently, the 2012 census implementation shows significant signs of symbolic implementation given the permanent resistance and disapproval of the new census strategy and its “more professional” approach with paid census takers, contrary to the versions based on volunteers and with a democratic tone.

Diagram N.9. Matland’s Ambiguity and Conflict Matrix

Source: Matland (1995)
The implementation literature also considers how organizational characteristics affect the performance of the policy. In his classic work, Wilson (1989) emphasizes the complexities of public organizations and notices that the characteristics of the agencies shape and transform the policy implementation in different ways. There are two interesting considerations about the agencies and the likelihood of successful policy implementation: the first is if policy results can be measurable (the outcomes), and the second is if the activities and tasks that the agency does can be observed (the outputs). Different implementation challenges depend on how observable the outputs are and how measurable the policy outcomes are. Ideally, the census policy should have worked as a "production agency" where the outputs and outcomes were highly observable and highly measurable, and managers would have had the opportunity to design a compliance system for an efficient and standardized result (1989, pp. 159–160).

According to Wilson's model, one of the problems faced by managers in production agencies is that they tend to pay the most attention to those more easily measurable results to the detriment of those that are less observable or quantifiable. Thus, INE's focus on advancing the census at the household level led to critical errors in its classification—uninhabited households rather than absent residents—, lack of thoroughness—stickers in unregistered housing—, and leaving in second place the quality of the enumeration at the individual level. In addition, the scarcity and high turnover of censistas and the problems of housing classification led supervisors to set aside their control tasks to support on-site tasks.

In contrast with previous de facto approaches—single day counts run by volunteers—this new scheme should have resulted in more control over the enumeration and the possibility to correct errors and even revisit houses and redo enumerations. However, the
dearth of supervision of the enumerators, the weakness of the control system, as well as other factors impeded the production of the desired outcomes of the implementation process—the enumeration—leading to a lost opportunity for corrections and adjustments. Ultimately, the outputs (i.e. process measures) of the census communicated the failed implementation, but these sirens sounded too late.

Another critical element for implementation is the expectations and commitment of the official actors as well as other non-governmental actors over the policy, and changes in levels of commitment and support for the policy over time (Ryan, 1995; Mazmanian & Sabatier, 1983). Public policy literature draws attention to the role that expectations have in the implementation since they can align the actors and their actions toward the achievement of the objectives. The change in census strategy was framed within the Piñera's government's promises of higher quality in public management. When President Piñera declared that the 2012 census would be “the best census in the history of Chile,” expectations became a major problem.

Expectations are a powerful force for policymaking because they involve multiple pressures and practical tensions. On this idea, McConnell offers the metaphor of "policy traps," referring to all that pressure on the government when facing a complicated issue, but also knowing that it doesn't have the capacity to respond accordingly (McConnell, 2020). The President’s statements exposed the census to the scrutiny of the public, media, and political actors, generating enormous pressure on the INE.

Furthermore, the commitment of the actors with the policy was diminishing over time as more and more difficulties appeared during the implementation. Complementary to the above, the citizens and the media showed their displeasure and disappointment in the absence
of census takers at their doors or "stickers" that erroneously classified households as already counted. So, despite the numerous efforts of the INE managers all over the country, there were many problems: the turnover of interviewers, the unexpected difficulties in the field, the misclassifications of houses, the pressure of the media, the lack of collaboration with Chile’s citizens—the traditional partners in the de-facto census scheme. All of these difficulties reduced the support and commitment of the INE officials themselves with the census project.

The implementation literature also highlights the importance of having adequate resources to carry out the policy goals (Ryan, 1995; Pülzl & Treib, 2006), and as stated in the case chapter, this was a particularly weak point for the 2012 census. Given the reliance on newly hired enumerators instead of volunteers and the longer duration of the census, the INE authorities requested additional resources from the ministry of economy; the National Congress then approved this request. However, the INE had no experience in this type of census, did not carry out the necessary pre-tests to calculate workloads, and did not consult experts with experience in surveys. Thus, the budget was based on generalized and unexamined assumptions. The amount of funds requested by the authorities were finally poorly calculated, underestimated by at least 23% (INE, 2013b, p. 20). Even though some of the INE managers quickly realized those resources were insufficient, the INE authorities did not dare to demand the additional funds needed, for fear that this calculation error would be exposed and generate undesirable political consequences.

A lack of resources was clear from the very beginning and was a constant limitation throughout the implementation. For example, the number of people to be trained was reduced, the control system based on cell phones was discarded, and the educational program for the population eliminated. Also, the lack of resources limited the access to transportation
of censistas and supervisors, particularly in rural areas and isolated sectors. INE authorities made calculation errors first, and then, did not correct the mistakes. In line with the idea of avoidability highlighted by policy failure literature, the scarcity of resources that caused many problems could have been avoided.

The top-down implementation perspective emphasizes control and hierarchy as critical elements to ensure compliance with policy goals. In the 2012 census, the lack of controls on census takers and the flaws of the supervision system—both of its design and its use—showed many weaknesses. Although the new census featured a new control system and monitoring tools, the administrative records confirmed that the expected controls were not applied and therefore the information available was not enough nor of sufficient quality to detect correct errors in time. As stated by the INE CEO: “the decision [census change] was irresponsible, of that there is no doubt about it. But it was more irresponsible not to control the census than to have changed the methodology; we could change the methodology; we could have done it well.”

The weakness of the training and the inadequacy of the operation meant that the implementation did not fully conform to the de jure logic, but in many aspects, it operated according to the old methodology. Thus, the 2012 census implementation was full of assumptions, practices, and tools that corresponded to the de facto modality. A few of several elements that express this lack of coherence were: i) The initial assumption that the surveys could be applied during weekdays and working hours—in the de facto modality the census day was a legal holiday, so people waited at home for the censista. ii) The organization and division of the territories corresponded to de facto modality and initially designed for the work of a single day. iii) The questionnaire and folder group management system was
designed for a single day interviewer's workload, and therefore, it did not work well in the new modality, as a later report confirmed: "the calculations in terms of the daily productivity of each census taker, taking as a reference the coverage achieved in a de facto census, turned out to be assumptions not applicable to the reality of a de jure census" (INE, 2014b). iv) The confusion between absent residents and unoccupied houses, which caused significant omission problems, also corresponds to the de facto logic.

Thus, the implementation of the census could not solve the difficulties that already came from the formulation stage, and contributed to more complications. Even though the new census policy had a clear mandate, the implementation process was not structured enough, nor did it have proper resources or adequate control mechanisms. Also, the commitment of the implementing officials–INE employees and census takers–diminished over time, and as problems arose, so did the support and confidence in the quality of the process by stakeholders, authorities, and citizens.

6.3. **Policy Evaluation**

Continuing with the use of policy cycle heuristics, the final stage of the process is the evaluation, which can lead to the termination of the policy, redesign, development of feedback mechanisms, and diverse patterns of policy learning (Jann & Wegrich, 2007). The census case shows interesting tensions in this respect because of the numerous evaluations performed and the intense debate about the failure or non-failure of the census, which finally resulted in the rushed abbreviated census in 2017.

Censuses usually take place every ten years and therefore the assessment of the previous census and learning obtained will be reflected in the next count. Thus, the pace of
the census is very different from other policies, and so is the evaluation. Before the 2012 episode, assessing a census was a strictly technical process, carried out within the INE, in collaboration with specialized organizations such as CELADE, and without the participation of the citizenry or political actors. Undoubtedly, as seen in the case description, the 2012 census was particularly controversial and evaluation didn't follow these regular channels and was suffused with controversy.

The census literature points out that the quality of a census goes beyond its statistical accuracy and rigor; also, "[Census] quality has to do with user needs and satisfaction" (UN, 2008, p. 54). Therefore, evaluating a census is a complex task that is increasingly approximated as a multidimensional concept. To assess census quality, the UN recommends considering at least the following dimensions: relevance, completeness, accuracy, comparability, coherence, timeliness, punctuality, clarity, accessibility, and metadata (UN, 2008; CEPAL, 2011a). For example, census data may be accurate and meet high statistical standards, but not deliver information relevant to user needs; or data may be accessible across different platforms, but unclear or difficult to understand. Given these dimensions, scarce resources, and the diversity of user needs, evaluating a census is undoubtedly a major challenge. However, the challenges of assessing a census are no different from other policies. Neither are the inherent epistemological and methodological conflicts regarding evaluation, as well as the tensions over the idea of success and failure.

The field of policy evaluation is full of different perspectives and conceptions. As examined in the literature review section, there are several perspectives and benchmarks to understand policy failure and success. In terms of failure, some of the considerations to define a policy as unsuccessful may be quite diverse: inability to achieve the planned goals,
lack of effectiveness, lack of social legitimacy, failure to meet client expectations, or opposition from key stakeholders, among many others (Vedung, 2006; Howlett, 2012; McConnell, 2015). Confirming what this specialized literature points out, in the case of the 2012 census different actors had diverse parameters to understand what happened. There was also a strong disagreement on the criteria for assessing failure (Bovens & ’t Hart, 1996).

Different investigations of the 2012 census had diverse emphases, methods, and purposes. The commission of national experts evaluated the census considering the training, the survey process, the quality of the data obtained, the omission rate, as well as organizational considerations at the INE. This investigation concluded that errors were severe, the data were not reliable for public policy purposes, and they strongly advocated for running a new census in an abbreviated format as soon as possible. These are clear elements of support for the proposition that the census was a “failure.” Unlike the previous investigation, the commission of the international census consultants focused their inquiry on the quality of the data obtained, its usability, the possibility of correcting and rescuing the data, and assessing the census as utilizable and of good quality.

The subsequent special investigation commission of the chamber of deputies focused on the accusation of data manipulation and administrative and political irregularities of the census process, emphasizing political responsibilities, especially of the INE Director and his closest advisors. Following that, the prosecution office conducted its inquiry, investigating the possible commission of a crime in data imputations and the erroneous presentation of the census results. The prosecutor concluded that, despite several irregularities and faults detected, given the existing legislation, mishandling census data did not constitute a crime and desisted from further investigation. Finally, there was the evaluation carried out by
general comptroller, with a focus on procedures and the compliance with public administration regulations, that found numerous anomalies and non-compliance of rules and requirements, so it was ultimately the comptroller who deemed the census as "illegal."

As observed, these evaluations contain different methodologies, assumptions, and foci on the census’s singular event. This battery of assessments generated many tensions and intense debate about what was evaluated, how it was assessed, from what perspective, how was the quality of the analysis, as well as the technical capabilities, political intentions and the evaluator biases. Disputes over evaluation go beyond the evaluation committees. The 2012 census resulted in highly public and contentious disagreements among the media, political actors, experts, census specialists, and citizens regarding the nature of the evaluation, the quality of the evidence, and ultimately what constituted a successful versus a failed census.

Most of the actors interviewed considered the inability to reach the goal of expected coverage a primary determinant of a failed census. According to the literature, the construction of the idea of policy failure is much more complicated than the incapacity to meet the proposed goals. However, the national commission of experts’ evaluation marked a point of no return in the idea of failure. When the commission announced the census omission by 9%, higher than previous censuses, higher than other countries of the region and much higher than expected, the idea of census’s failure settled deeply in public opinion. This situation points to the idea of social construction of failure that is so relevant in the literature (Bovens & ’t Hart, 1996; McConnell, 2015). Once the 2012 census was framed as failure by the commission of national experts and then confirmed by President Piñera's apologies, the
idea of failure was installed, and despite subsequent efforts to recover the data, there was no way to turn back.

However, the judgment on the failure of the census differs between actors. While for the public, the media, and most of the interviewees, the high omission was the determinant of the failure, for other actors the discussion goes beyond the 9% figure by pointing out some nuances about what is behind that number. For example, the debate among census specialists and statisticians goes beyond census coverage or omission rate to address the quality of the data gathered and the usefulness of that information for decision-making, An INE demographer explained,

Our conviction that the census was bad was not because the omission rate was much higher than the historical one, the 9%, but because it was an omission rate that was very, very asymmetrically distributed at a regional, local and demographic level, and thus distorted the basis of the information.

Along the same lines, another census expert pointed out the severity of the data bias, I do not understand how there are statisticians and statistical directors who say that a lousy census is a good sample, which is what Coeymans said, and that's what Labbé said, ‘But we have millions of records.’ Sure, but biased, and if it's biased, I cannot make a population inference, and I cannot do public policy, because it is biased already!

Beyond the omission rate and expert criteria, the census case reveals different benchmarks under which different actors understand the failure. Some interviewees emphasized the waste of public resources; others argued that the census failure was eminently political and mostly constructed by the opposition parties to damage Piñera's government; others considered the whole situation as a communication failure because of the inability of the government to handle media and public perception about census problems.
For a group of interviewees, the collapse of the census was due to the INE’s political and technical incapacity to rescue some data and learn about what happened. In this connection an INE interviewee stated, “Yes, the 2012 census was a failure. But the failure was not because of all the garbage, no! There was not the slightest rescue of what was good, nor learning; there wasn’t!” For other interviewees, the cause of the failure was the lack of transparency of the whole census process, because bad practices were observed in the formulation, implementation, and also in the delivery of results. Thus, and referring to the INE authorities' lack of honesty, an INE manager pointed out, "You can make a mistake, you may have made a bad decision, you may not achieve the expected results, but in an honest way.” For other actors, the critical factor making the census a failure was losing confidence in the data. "The failure,” stated one INE manager, “we regressed in credibility and confidence. Those factors distinguish stages of development, believing or not in an official figure is what distinguishes a developed country from an undeveloped one.” Likewise, another expert interviewee declared: “the problem is that the census was politically burned out, and could no longer be fixed. No one was going to trust that census.” Hence, there is no single or simple explanation. Indeed, all of these interpretations of the census failure are aligned with policy failure characteristics and their convoluted nature, features widely emphasized in the literature.

The case shows the multiplicity of criteria to judge and evaluate the failure. Additionally, this debate sparked a reflection on how to evaluate a census, as expressed by one INE high official:

How do you rate a census with 90% coverage? You would say: it depends. Because if this were a developed country, I would say it is of poor quality, but if it is in Haiti, I would say it is excellent. Therefore, you cannot catalog for the result; you have to
look for other elements, other characteristics. Because, when you evaluate a census, you need to have all of that in perspective, where it is being developed, with what tools it is being designed, and who are the ones that are evaluating.

The discussion among specialists, experts, and politicians about what elements should be considered for the evaluation, who should have done the assessment, and how the census should have been evaluated was relentless and heated. Undoubtedly, one of the most conflicting situations was the discrepancy between the census assessments of the national expert commission and the international specialists. The tensions were in several regards: the disagreement over the criteria used and the technical quality, timing and opportunity, the political biases that could influence the evaluations, as well as recommendations on the use of data for public policies. All of these again are very much in line with the literature on policy failure and the incessant discrepancies that trigger these phenomena.

As we have seen, the considerations and debates on the quality of the 2012 census, the evaluations carried out, and the ideas of failure were numerous. Given this complicated scenario, the new government of Bachelet announced a new census in 2017 under the traditional de facto strategy, which marked the cessation of the debates, at least for a while, and a clear political gain for the incoming administration.

From the policy cycle point of view, the different evaluations (political, technical, and administrative) finally determined that the innovative de jure census had effectively failed. Thus, although contrary to the regional trend on censuses, the 2017 census returned to the traditional de facto strategy.

Under the enormous pressure of having up-to-date data for policy decision-making, five years after the failed census in 2012, the INE carried out a new census in an abbreviated version and under de facto methodology. With an omission rate of 4.7% (Gob.cl, 2018), the
2017 census was considered successful by the INE, international organizations, political actors, and citizens. A blogger highlighted the recovery of the democratic sentiment: “The last census revived community feelings, [...] thus extending a tradition as old as the love for this homeland” (Hopenhayn, 2017). A political analyst commented: “No one can deny that the census process was a success as far as citizen participation is concerned” (Navia, 2017). Likewise, CELADE's Demographics Officer emphasized some positive elements of the 2017 census:

There was a very coordinated effort among the different units of the census, statistics, logistics, etc. This was an advantage to other censuses and also an example of how to solve many things in the future. What I saw there was a lot of innovation.

The 2017 census evaluation was positive, the symbolic value of the de facto census for the actors and especially for the citizens, was a determining element for the census success. So much so, although the technical arguments are against it, many actors—including politicians, experts and even INE officials—considered the balance tipped towards a de facto for the 2022 census. However, and based on technical arguments, the INE announced the 2022 census would be the under the de jure methodology (Pulso, 2020). Accordingly, preparations are underway, including the definition of the questionnaire's topics through the participation of government agencies and citizen consultation (INE Noticias, 2019c, 2019d).

This chapter reviewed the 2012 census case in Chile using the policy lens, emphasizing those elements of the policy that influenced the failure of the census. Both the policy formulation and implementation stages exposed severe deficiencies in the policy, and the evaluation stage revealed the tensions inherent in policy failure cases. According to the policy cycle and the main stages—formulation, implementation, and evaluation—the
following Diagram N.10 synthesizes the critical elements of the analysis from the policy lens.

**Diagram N.10. Analytical Keys From the Policy**

**Policy Formulation**
- From de facto toward de jure census
- Authorative and rushed decision
- Lack of time to prepare
- Lack of participation
- Lack of census leadership
- Underestimation of the complexity of the census

**Implementation**
- No previous experience
- Lack of resources
- Top-down, hierarchical approach
- Distance between goals and means to fulfill the goals
- Inadequacy of control and supervision mechanisms
- Significant levels of conflict and high ambiguity
- High expectations and low commitments to the goals

**Evaluation**
- Numerous assessments
- Different benchmarks and methods to assess census quality
- Intense debate regarding evaluation
- Data is not useful for public policy purposes

**Re-Formulation**
- De facto census in 2017
CHAPTER 7
POLICY FAILURE. ANALYSIS FROM THE ORGANIZATIONAL LENS

This chapter analyzes the case—available in Chapter 5—through the organizational lens, focusing on the Chilean National Institute of Statistics (Instituto Nacional de Estadísticas, INE), the agency responsible for carrying out the census as the unit of analysis. This second lens relies on different organizational literature (organizational theory, organizational behavior, organizational sociology, and organizational psychology) to explore the INE dynamics regarding the 2012 census.

Some of the reasons organizations fail to implement policies are due to policymakers' and legislators' lack of concern over administrative issues and miscalculations of the organizations' capacity to drive the policy. Too much emphasis has been placed on the policy formulation and much less—or sometimes none—on the characteristics of the agencies and the mechanisms and conditions of policy implementation. The role of the organization, its routines, values, and other characteristics also determine and shape the policy (Derthick, 1990).

There is abundant and diverse research literature on the complex nature of public organizations. This chapter does not intend to build a novel theoretical perspective, but instead will explore some organizational features that are associated with the failure of the 2012 census (Rainey, 2009). Therefore, and according to the thorough analysis performed,
this chapter focuses on the most relevant factors that impacted the census. These are: goals and values, the structure of the organization, leadership, capabilities and motivation, power struggles, and decision-making and groupthink. Appendix N.4 presents maps of themes identified by the content analysis performed.

7.1. Goals and Values

Organizational goals are defined as “conceptions of desired ends that participants attempt to achieve through their performance of task activities” (Scott, 2003, p. 22). A way to explore the INE’s goals is to examine what the INE does as well as formal statements of what the organization seeks to provide. The INE is one of the oldest public organizations in Chile, founded in 1843, and is responsible for producing and coordinating the country’s official statistics. INE’s work is complex and covers a variety of areas. Through surveys and other sophisticated data strategies, the INE collects information all over the country and delivers data to different users such as companies, government agencies, unions, researchers and the general public. Currently, the INE develops 70 statistical products, in areas such as social statistics, agriculture, economics, employment, environment, demographics, and vital statistics (INE, 2020). Some of the most important products are the National Urban Survey on Citizen Security, the Consumer Price Index, the National Employment Survey, the Census of Population and Housing, and the Agricultural Census (INE, 2020).

The INE institutional mission is: “We are the public institution of Chile in charge of generating the country’s official statistics and articulating the National Statistical System, with the purpose of disposing of quality information for decision making at national and territorial level” (INE, 2020). Complementarily, the INE’s vision is: "Our statistical
production will respond, with efficiency, modernity and methodological rigor, to the changes in Chilean society and territorial needs, seeking to increase the value of statistics for the development of the country” (INE, 2020). There is agreement among the interviewees that the INE has a genuine commitment to provide quality statistics to citizens. However, there is also agreement that INE is still far from achieving these important goals, especially regarding the expected role on national statistics.

Accordingly, one of the main characteristics of the institution is its commitment to the production of public value, in the same vein that the literature calls Public Service Motivation (PSM), that is, those beliefs, values, and attitudes of individuals to go beyond self-interest, and trigger the desire to serve the abstract idea of the public interest (Vandenabeele, 2007; Schott et al., 2019). All interviewees agreed that this motivation is very strong in the INE and its employees, as one INE official states: “the INE’s business is trust, that is our main product, it’s the public good that we must safeguard." Also, INE professionals feel that the INE is a unique agency, because, through surveys and concrete data, it connects citizens with public policy decisions. An INE interviewee echoed, “The INE does something no other service or other public institution has: that the INE arrives every day to someone's house."

For INE members, history and achievements are an immense source of pride. There are many stories of methodological and operational innovations and collective effort to achieve quality statistical products. These are powerful shared beliefs that operate as interpretive frames of history and are generally resistant to experience (Levitt & March, 1988). For many, the INE has always been synonymous with "objectivity and trust," values embedded in the beliefs of its members and citizen perception. Thus, interviewees agreed
that the INE has always been a technical institution, highly respected by citizens and political actors. They also underscored the professional commitment of their public officials, the pride of being INE and belonging to "the big INE family." An informant remembered this feeling of pride, "they [INE officials] had tremendous pride, that is to say, I always remember in the conversations they felt very proud that their statistics were stable and not dependent on the government of the moment."

However, the 2012 census event and the escalating consequences deeply wounded the INE pride and this strong sense of belonging, as an INE official said, “because somehow, everyone in the institution, no matter what position within it, administrative, assistant, everyone lived this [census polemic] as a personal issue, as a grief, it's not just the problem of the place where you work.” Likewise, another INE high official explained how the census errors affected INE officials,

There were people in the INE who started out as a pollster, then became a supervisor and with that work educated their children, that is, there are still people with a sense of belonging and enormous pride, and those people were affected when they said that the INE did everything wrong [...] that pride, let's say, was stained in some way.

Although the INE had good reputation and historical prestige, several interviewees agreed that the INE was, and still is, a precarious public organization failing to meet expected standards. In the words of an interviewee, "It was obvious that the INE was in, not a crisis, but even before the census, it came with strong issues of institutional deterioration." In comparison with other public services of the state of Chile, the INE was lagging. This fragility of the INE is due to several factors; the most relevant are the institutional configuration and the lag in modernization processes. On the one hand, emphasized by most stakeholders and the current bill, is the lack of INE independence from the executive branch;
it is under the tutelage of the Ministry of Economy, and therefore, it is not an autonomous body as the most prestigious statistical institutes in the world. The INE Director is a political trust position. The election of the director relies mainly on the president’s criteria, not necessarily on management skills, technical expertise, or career achievements, which contradicts its technical nature. The following quote from an expert expresses the seriousness of this situation,

The institutionality of the INE is badly made, poorly designed. The INE urgently needs to have a technical high-level council to ensure technical independence. Today it’s just another public service of the government, and that cannot be! In what serious countries does that happen? None!

The INE has been unable to modernize; it is a stagnant organization in terms of its vision, processes, and management of human, financial, and technical resources. An INE manager interviewed referred to this idea, “The INE has been left aside, I do not know why […] I think it was a precarious institution in human resources, technological resources, in infrastructure.” Another interviewee pointed out a similar idea referring to the INE at the time of the 2012 census: “In the INE things were upside down, they did their job, but there were unclear procedures. In other words, it is a rather precarious public institution, different from this idea that the INE is super professional.”

### 7.2. Organizational Structure

Another essential feature to understand the INE and its role in the census policy is the structure and characteristics of the organization itself. A formal organization is understood as “groups of individual members assembled in regular ways and established structures and procedures dividing and specializing labor, to perform a mission or achieve an objective”
(Allison & Zelikow, 1999, p. 145). Some elements of organizational structures are the size, degree of centralization of decisions, levels of complexity, and the degree of formalization of practices (Rainey, 2009).

About the size, the INE is a medium-sized agency with around 2,300 staff members throughout the country in its central and 15 regional offices (INE, 2020). Regarding INE funding, by 2012, the INE budget was 45 billion Chilean pesos where 17 billion were for the de jure census; in 2017, the INE budget increased to more than 67 billion and 27 billion pesos were allocated for the de facto census25 (all figures as of December 2018) (INE, 2020). Below, Chart N.1 shows the evolution of the INE budget from 2004 to 2019. Accordingly, there is a clear budget increase in 2012 and 2017, corresponding to the census funding.

25 In 2018 figures, 45 billion of Chilean pesos are equivalent to US$ 57 million, and 67 billion of Chilean pesos to US$ 85 million.
At the time of the 2012 census until mid-2019, the INE had the following organizational chart: under the National Director, there are three Sub-directorates, administrative, technical, and operations, as well as all regional directorates. As in most of the public institutions in Chile, and given the unitary and centralized structure, the INE national director concentrates the decision-making; the regional offices replicate the national structure and follow the decision made by the central level. The most important units for the INE are the administration, operation and technical Sub-directorate. Diagram N.11 presents the INE organizational chart in 2012.

26 Complementary to census allocation of resources in census years (2012 and 2017), there are also census resources in the years before and after each census.
Diagram N.11. Organizational Chart, INE 2012

The chart shows the dependence of the Sub-directorates and departments of the National Director. Along with the Director, the Sub-directorates (in color) are the most important units of the INE. In addition, the INE organizational charts of 2017 and 2019 are available in Appendix N.6.

However, in line with Meyer & Rowan (1977), the organization's formal structure does not necessarily reflect how things are actually done. Thus, the INE had a complicated internal structure, with many units, departments, and sub-departments that work on different topics and products. An INE professional described how complex the organization is: "The INE is so big! You work there, but you don't know the whole INE. It's like the elephant story, some know the trunk, others the tail, others the ears, but the complete elephant is tough to know."
The INE tasks’ organization was around different projects such as household surveys, employment surveys, the CPI, or the census, among many others. Thus, INE's management model in 2012 focused on products rather than work processes, which required significant coordination efforts between departments for each of INE's projects. The analysis performed confirmed the coordination difficulties, the lack of clarity, and the constant stress on officials caused by INE's working structure. One of the most critical points refers to tensions and competitions between work teams, especially between the technical and operations Sub-directorates, which, according to some interviewees, were the center of power struggles. This is confirmed by an organizational culture analysis (CSP, 2016), which, in addition to noting the absence of mechanisms for assessing processes and products, highlighted these coordination difficulties: "lack of coordination among work units: inadequate organizational structure. The current structure favors competition among units, duplication of work and commands, and ignorance of the work performed by other units” (p. 5).

One of the INE's critical issues is the absence of a permanent census unit or department within the organization's structure. As a former INE authority pointed out: “The INE has never had a permanent census department. Never. It has demographers, it has geographers, but there are no people dedicated between census to census to review, think, or prepare.” Contrary to a commonly-held idea that the census is the most critical task for a statistical institute, the census's importance is not echoed in the INE structure or decision-making. Historically, the census was an annexed or exceptional project, as a former INE manager declared, "the INE manages the census as a project apart from the work of the Sub-directorates, though with some communicating vessels."
Contrary to expectations—a permanent census unit—what happened before the 2012 version was that, in the years previous to a census, INE authorities set up the census team, taking professionals out from other units, and then, the entire organization got involved in the census. Before 2012, INE workers’ commitment made up for the lack of resources and inadequate preparation. INE interviewees remembered that the 2002 de facto census was a tremendous logistical and technical undertaking with plenty of institutional mystique. All INE employees did their utmost for the census, because as an INE professional said, the census "belonged to the whole INE.” Consequently, the census was a short-term project for the INE, and therefore, there were no incentives (neither financial nor political) to invest or strengthen the project for ten more years. Thus, technical knowledge and practical experience dissipated and professional teams disbanded over time.

Interviewees agreed that the 1992 census was a great one, but that already the 2002 census was challenging and showed hints of problems yet to come: the difficulty of single-day operatives, hardship in covering certain territories and lack of volunteers. Overall, the 2002 version achieved its objectives and is considered by several stakeholders as a good census, with great support from relevant actors, reliable data, and a low 3.8% omission (Tacla, 2006). After the experience of 2002, the need to strengthen the census unit and formalize hitherto informal practices was clear to many actors. This reinforcement would have meant strengthening the census team, making it permanent and with more and better financial and human resources. However, the strengthening of the census unit did not happen; on the contrary, the team continued being marginal to the INE, with a high turnover in leadership, lacking resources, and a shortage of any real power. In the following quote, a former INE manager refers to the idea that the census was never a priority at the INE:
Although they [INE authorities] said the census was the most critical project for the INE, in practice, INE Directors did not give it the necessary importance, they did not ensure the required competencies. They continued working as if the census is a separate ‘animal,’ from a perspective of voluntarism, almost like it [the census] was going to grow up alone.

The lack of formalization of the census in the structure of the INE explains, for example, the absence of detailed documents about census processes, because once the census project ended, the urgency decayed and the team was gradually dismantled. Therefore, it is an informal knowledge that rested on particular people; some remained in the INE in other tasks, and others left the INE. Along these lines, an official of the INE referred to the lack of systematization of the experience of running a census: "Unfortunately, in these special projects [such as the census] there is no knowledge management because there is no repository; there is none. Although the methodology is written, the how, the why are not written."

This lack of formalization of functions, processes, and coordination has been an obstacle to achieving goals (Scott, 2003). Faced with these deficiencies, it is not surprising, then, the emphasis that all INE interviewees place on the importance of experience in working at the INE or in the census project. Thus, the interviewees stressed the role of specific people for the achievement of a good census. A former INE manager declared, “the difference with the previous censuses is that they had Odette Tacla who is an eminence of censuses” (Cabezas, 2013). Likewise, interviewees also emphasized that, except the head of census, the professionals of the 2012 census team didn’t have census experience, an INE interviewed related, "the only one who really had ‘gone through’ two censuses, with actual
implementation experience, was the head of the census project […] But he was the only one.”

Therefore, unlike the 1992 and 2002 census, where most INE professionals had the experience of the 1982 and 1992 versions, by 2012, most of experienced professionals no longer worked at the INE. The interviewees commented that some of them left the organization searching for better job opportunities, but others left the INE due to changes in government and INE administration. That's how the head of the census described the situation: "for the 2012 census there were very few people with that experience, in fact, you can count with the fingers of a hand the people who had 'gone through' a census " (Carrasco, 2013, p. 5).

This absence of a permanent census unit with adequate capacities is not a recent concern for INE managers and census experts. However, for the 1992 and 2002 censuses, and despite difficulties, the INE was able to articulate work teams and come out successful. However, no doubt those were other times and another INE. According to the interviewees, in the years 1992 and 2002, it was a smaller INE, more cohesive, and with more "soul" than the 2012 INE. Also, the nature of the de facto census as a social endeavor and citizen symbol gave prominence to the INE and, therefore, officials from all areas were actively committed to achieving a good census. In this regard, a former official commented on the efforts made to get the entire INE involved in the previous census: "In the 2002 census, director Máximo Aguilera generated an organizational imprint including a coaching process carried out by an external company for seven months" (Jara, 2013). For INE workers, especially those in the institution for a long time, the memory of INE's collective experience of past censuses is alive and very powerful. These feelings and achievement memories contrast with the 2012
census, where there was no significant involvement of other units of the INE, not until the end of the census, when there was no time and the problems were severe, as recalled by an INE professional:

And the internal discourse to INE officials was that we were going to be able to continue doing our usual jobs. [...] So, when the census operation began, they [the INE authorities] didn't ask the units for support, because there were fourteen, fifteen thousand people hired. So, they told us, to the officials, to continue with our routine tasks because the census was going to work fine.

Despite the decades, previous censuses' experience is still alive in the INE and many other actors. Thus, for several interviewees, whether or not there is a census unit, the census’s enormous complexity ultimately requires commitment, leadership, and “mystique” capable of uniting efforts from numerous actors throughout the country.

In 2019, the INE began a necessary institutional restructuring process based on international standards of statistical business processes models. It is an ambitious transformation expected by INE officials, which modernizes the INE and corrects several deficiencies in its organizational structure and processes (Estrategia, 2019). Some of the most significant advances are the separation of functions between the technical and operations Sub-directorates, and a greater emphasis on work processes. Accordingly, the INE declared, "this reorganization leads to the INE’s statistical production no longer being structured based on products, but based on processes, thereby achieving gains in efficiency and effectiveness in the various internal procedures” (INE Noticias, 2019b).
7.3. **Leadership**

Since Max Weber's early works on bureaucracy and types of authority, different branches of public administration literature emphasize authority and leadership in organizations (Weber, 2009; Schein, 2004; Parry & Bryman, 2006). The 2012 census case evinced that the INE's performance is particularly sensitive to leadership styles. The INE's authority relied on the Director, his/her skills, and its vision for the institution. For the INE, the lead role goes beyond the idea of influence and coordination of activities toward achieving objectives, closer to the notion of leadership as a “manager of meaning” (Parry & Bryman, 2006). For example, the interviewees emphasize the modernizing vision of Máximo Aguilera (INE Director, 1997–2006), he promoted the improvement of processes, increased the institution’s funds, and fostered a significant technological update. Under the Aguilera administration, despite some difficulties, the INE successfully carried out the 2002 census. The interviewees frequently touched on Aguilera’s leadership in numerous efforts, creating a commitment of the entire organization to achieve a good census.

Likewise, the interviewees remember the leadership of Mariana Scholnik (INE Director 2006–2010), a woman with great technical knowledge, who was responsible for essential changes in the INE organizational structure, improvement of teamwork, and coordination between units. According to the interviewees, she saw an opportunity to improve the INE due to Chile's entrance into the OECD, developing an inspiring vision of a more professional INE, increasing the resources and INE prestige, and, in that way, strengthening technical capacities. An INE manager remembers those progressive times with some sadness, "It was a time that was imbued with a lot of mystique because Mariana Scholnik was very clear about where the Chilean statistics should go, where our public
statistics were going." Confirming this idea, an INE professional at the time referred to the Director's vision:

She was very professional, she had more technical knowledge than charisma, but she knew what she was doing. I will never forget that she always said: 'I'm building the INE of the future, the INE of ten more years, not the INE of today. Maybe you won't understand what we're doing now, you just have to trust ten years'. And you'll realize that everything that was achieved in the INE is what was founded at that time.

Thus, more or less in tune with the particular views of the previous INE Directors, interviewees recognized an inspiring vision and modernizing endeavors, as an INE professional noted, “the different directors who passed through the INE, Máximo Aguilera, Mariana Scholnik, were making their different efforts to professionalize the INE." However, due to health problems of Scholnik’s, there was a significant decline in the INE performance during the latter half of her organizational oversight. In this period, the lack of leadership generated conflicts between different units, a lack of follow-ups of modernization efforts, and uncertainty. The interviewees remembered those years as a complicated time for the institution, with ambiguities and confusion, technical and human tensions; and a sense of losing the course. In this context of institutional confusion and under President Piñera’s term, the government demanded Shkolnik’s resignation, and then Francisco Labbé took over as the Director.

INE officials believed that the Director should come from the organization itself, someone with high technical knowledge and who knew the organization’s complex dynamics. So, Labbé was not the Director that the INE expected. He came from the academy—he was a professor and dean of the economy department at a private university—though not a statistical expert, and without experience leading organizations, nor the
knowledge of the public sector’s intricacies. Different interviewees agreed that the choice of Labbé as Director of the INE was inadequate, as an INE official stated, “Labbé had neither the character, nor the contacts, nor the wisdom, nor the prudence necessary to take charge of an institution with this number of officials and with that budget.”

The arrival of Labbé in 2010 to the INE was unusual. In contrast to standard practice in the Chilean state, whereby directors replace upper management in its entirety when assuming command, the new Director did not dismiss managers or modify positions; not even remove the chief of staff—a job that is usually of personal and political trust. According to those interviewees closest to Labbé, that was an explicit strategy of the Director, as a sign of trust in INE’s technical capabilities and political independence. Other interviewees understood the absence of changes to Labbé’s lack of knowledge about the public sector and statistical matters; and another group of respondents also thought that for Labbé, the INE was just a step in his academic career rather than a commitment to public statistics.

Therefore, the structure and INE tasks remained the same, and in practice, the Director did not get much involved, as one INE manager recalled: “Labbé was a very absent director, very absent. He was distracted; that is the feeling. I think he always felt like he was on someone else's farm.” Labbé’s only action was to hire a few personal advisers and appoint one of those advisers, Mariana Alcérreca, as the CEO of the INE, a special position Labbé created, but strange for Chilean public agencies; the same CEO referred to her appointment, “[Labbé], names me—in quotation marks—because the position does not exist; I was a fee-contract employee, but he names me internally as CEO, which is a figure from a private structure that does not exist in the public world.”
Alcérreca is a right-wing commercial engineer with experience in both the private and public spheres; she knew the INE well because she was a consultant in institutional management matters. INE officials knew her because of their work together and in general, had a good opinion about her management knowledge and skills. Thus, without having an official position or experience in statistical matters, she was the one who defended the census strategy change before the National Census Committee and participated in all INE key decisions. As CEO of the INE, she gradually became the Director in the shadows. In the words of an INE manager, “In the Labbé administration, Mariana Alcérreca was who actually did the job. She was the Director of the INE.”

At the beginning, Labbé’s decisions were well perceived by managers and officials, because things did not change much, as one manager said: “during the first period of Labbé we worked in peace, I cannot complain, because the old man was lazy; we worked, and he did not get involved at all.” At the same time, the work with the CEO was collaborative and dynamic; in general, INE officials respected Alcérreca. An INE manager better explained the CEO role in the following excerpt:

Mariana Alcérreca mediated between Labbé and the INE. Then we worked with her. She analyzed the budgets, decided what is done and what is not done, what figures come out and when they come out, everything, every decision went through her. Little by little, finally the discussion was only with her. Labbé just put his signature on it.

The model with the CEO as mediating figure worked for a time with relative calm, until the change of the census strategy and other difficulties arose. From the perspective of INE officials, Labbé was never politically or technically legitimized as a leader. The initial silent style of leadership later passed to an authoritarian style or as many interviewees
alluded to "irresponsible" given that the Director made decisions without knowledge, and without consulting experts or those in charge.

The INE is a centralized institution where the role of the Director is predominant in terms of the decision-making structure. As noted, the leadership of the INE had been under stress since the previous administrations, but the arrival of Labbé, the increasing empowerment of his closest advisors, and the mediating CEO figure finally ended up aggravating the organizational tensions, and eliminating any clear leader.

7.4. Capabilities and Motivation

Another key feature is the motivation of INE employees and the capabilities (technical, political, professional) to develop the work entrusted to them. There was agreement among the interviewees that despite significant efforts, the INE didn’t have the professional and technical capabilities to match the complexity of its task. To understand this issue, it is important to distinguish the situation of the INE's senior managers and other professionals.

In 2003, the State of Chile initiated a major civil service reform for the selection of senior public officials (SADP, according to the Spanish acronym) seeking to overcome historical patronage and move to merit-based recruitment and selection system toward a more effective and efficient state (Olavarría-Gambi & Dockendorff, 2016). Until 2018\textsuperscript{27}, this selection process only considered second and third–line professionals; then, the INE Director

\textsuperscript{27} New regulation to the SADP includes public and merit-based selection of top public managers at the first and second level of the hierarchy. (E&N, 2017; Servicio Civil, 2020).
remained chosen based on personal trust or political affinity criteria. The interviewees agreed that thanks to the SADP, the INE has achieved to recruit managers with better credentials, offering them better salaries and stability in a process that also provides technical and political legitimacy. However, given the existing regulation, the positions of senior public officials selected by SADP can be removed by the president or the director in office (by the criterion of trust or affinity), which finally threatens the professionalizing effort. Despite this difficulty, INE senior officials have high technical capabilities.

The rest of the INE professionals' situation is quite different and related to the contractual structure of the mixed model of the Chilean public administration. There are three types of contracts defined by law: "planta," "contrata" y "honorarios." The "planta" are the permanent positions assigned by law to each public institution, with possibilities of being head, as well as earning tenure, official responsibilities, and better working conditions. The "contrata" or "by contract" positions are transitory and by law, last only until December 31 of each year. Public positions correspond to these first two categories. The "honorarios" or fee contracts correspond to the institution’s non-regular tasks, and are not public employees, which is the most precarious type of contract (Ley N. 18,834, 2005). The law establishes the size and configuration of type of contracts for the agencies, an issue that entails rigidities in hiring and career possibilities for civil servants. Accordingly, like most public agencies in Chile, the INE has different employment types with different career paths, benefits, and

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28 In their analysis of the Chilean public employment, Chamorro and Rosende (2018) expose the contradictions of public employment’ mixed model, observing the obsolescence of the employment structure, conflicts between types of workers, complexities of the pay structure among other problems.
levels of responsibilities, and generates conflicts between types of employees, resentment and lack of motivation for the employees in precarious labor conditions.

Chart N.2 shows the evolution of the INE's staff. Given its transitory nature and that they were not public office positions, the fee contract positions were not even officially considered as part of the INE until 2010. As observed, the number of “honorarios” civil servants is the most numerous at the INE, which also happens in other public administration agencies in the country (Valdebenito, 2017).

**Chart N.2. Number of INE Officials According to Type of Contract (2004-2017)**

INE workers are frequently compared with the professionals of the Central Bank. Although there are many jobs in the two organizations with similar professional requirements (advanced statistics, logistics), interviewees confirmed that the INE has fail to attract and retain professionals with high technical qualifications, such as those in the Central Bank. A manifestation of this situation is the inability to attract professionals from the best
universities in the country, as expressed in the following quote: "The INE is full of economists from the University of Santiago, and not from the University of Chile, because those from University of Chile [most prestigious] work only one year here, and then they leave to the Central Bank." Another expression of this deficiency is wages. Concerning the skills required (statistical, logistical), the INE offered lower salaries than the private sector’s and the Central Bank, as expressed by one interviewee, “the situation in the INE was a shame, that is, you look at the payroll, and it is clear you can't attract anyone good to work at INE." Consequently, and over the years, the INE has developed a kind of "inferiority complex" regarding the Central Bank.

This feeling of inferiority is compensated by a strong institutional identity and commitment to the public function. INE workers are usually career professionals, trained and promoted in the organization and worked there for a long time, a fundamental element of its identity. As an INE interviewee describes: "the people here define the INE as a proletarian service, as middle class, as hard-working people." Additionally, there is a high valuation of the learning that happens in the INE. The following quote of an INE interviewees expresses this professional pride: “there is no career, no master, no doctorate or post-doctorate that prepares you to lead the INE. Everything is learned there, because the INE does a very special thing, such as calculating the CPI, that is not taught anywhere else.” Similarly, another interviewee emphasizes this idea of the INE as a learning school:

You learn statistics in the university, but the statistics of the INE are learned in the INE. You learn everything, that is, how to impute data, how to decide… Because you do not always have complete information—the data samples are not enough, that is, sometimes you have to make decisions how to do it, whether to impute or not. All of that is learned there, at the INE.
Thus, the INE is conceived as a unique learning school, as indicated by a former High official: "we are training top managers, this is a hotbed of professionals, and sometimes they leave us for better salaries, and I do not feel sorry, on the contrary, I feel proud because we are training the best."

Despite the importance and emphasis of the technical rigor for the organization, the INE’s greatest strength was not its technical capabilities, but the sense of belonging and commitment of their employees to the public function, their public service motivation. Thus, the heart of the INE, the constituent elements of its identity, is its people, all those professionals, who year after year worked far beyond their responsibilities. An INE manager characterized the exceptional vocation of their workers: "The INE survives thanks to a group of officials who are willing to immolate themselves."

Another element that affects the self-esteem of INE officials is the different contractual conditions and the labor precariousness of most of them. Although this situation is not exclusive to the INE— it exists throughout the entire Chilean public administration— labor tensions tend to worsen due to government changes. Thus, job instability and the lack of recognition is a sensitive issue for all INE workers because most of them have been by contract or in the fee contract category for years (vulnerable and without benefits), as a former INE high official stated: "It is a very feeble institutional structure, because they are all ‘honorarios’ with all the difficulty that that means.” These contractual schemes also have complex consequences for decision-making. For example, managers not in the category of public employees—without accountability—assume decision-making positions, a situation that is very much resented by INE workers as it threatens the civil servant career and puts at risk the technical focus of the INE. This was the position in which the head of the census and
the CEO were in; neither of them was a public employee and both significantly influenced
census decisions.

The testimonies gathered evidenced numerous attempts to advance the
professionalization of the INE and its autonomy. However, unfortunately, the very meager
results have led to the INE to continue being perceived as a "two-bit" service. Experts,
managers, and other actors agreed that the INE worked below the standards that Chile's
statistical institution should have. According to the interviewees, many practices are not
written, and knowledge relies on specific people, all revealing a series of operational and
managerial shortcomings within the institution’s culture. An INE manager referred to this
worrisome situation, “the INE was accustomed to doing things without a serious
methodological framework or professional standards, that is traceable, replicable. In the INE
it was a lot of trade and little professionalization.” Another INE official added: "In each
professional rests the responsibility to do their job well, because institutionally it is not
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regulated, it is not established."
7.5. Conflict

Another dimension that appears strongly in the analysis of the census case is the conflict between the groups and the power dynamics involved. Different literature addresses power and the conflicts within organizations. For example, Vaughan (1999) points out that conflict appears when there is disagreement over the goals of the organization; also, Clegg, Courpasson, and Phillips (2006) note that resistance to power (or authority) and uncertainty generate conflicts and diminish the efficiency of the organization. In the case of the INE and the census, conflicts between groups accounted for a very tense organizational scenario during the 2012 census.

The decision to change the census strategy marked a turning point in the INE because it exposed the existing fragility of the organization and its vulnerability toward the decisions of the Director. An INE manager said of this complicated situation, “this is like the chronicle of a death foretold because it is evident that the institutionality of the INE depends only on the goodwill of the officials, and on the vision of the director of the moment."

From Director Labbé's and his supporters' point of view, INE officials' constant opposition—due to partisan politics—deeply affected the census. However, most interviewees believed that these arguments did not make sense. Interviewees confirmed that several of the signers of the letter of accusation were right-wing and supporters of Piñera, as well as some INE high officials and the CEO— who made the accusation to the press in April 2013. Regarding the letter, an interviewee recalled that "the group was divided into half and half. Those who could be from the political left and those who were pro-government. Some people were absolutely right-wing and signed the letter." A former INE official emphatically discarded the idea of damaging the census: "We can disagree on the method, but make it fail?
I mean, it's a fallacy that I rule out." Likewise, another INE interviewee categorically rejected ideas of a political conspiracy:

Never, never, never, never in everything that happened at the INE or with the disaster that came after the census, nobody ever did partisan politics; neither did we who denounced [through the letter], nor did they. Rather it was a thing between honesty and human stupidity, about how to do things well, do you understand me? So, there was no coordination of the left to undermine Piñera, I assure you!

However, the INE was resistant to Labbé, his advisors, and his decisions. The INE professionals felt threatened by the lack of technical criteria in the Director's decisions, and Labbé increasingly distrusted the opposition of the INE officials, attributing it to political reason. Consequently, Director Labbé empowered his closest advisers—young professionals without public sector experience or statistical knowledge—to acquire more and more prominence and incidence in day-to-day decisions, which generated tensions with the INE career professionals, both in professional terms and interpersonal relationships.

The Director was gradually excluding technical decision-making professionals and setting up a work team parallel to the INE’s formal structure, finally reaching the point where the INE was utterly divided. On one side, Director Labbé and his closest advisers, while on the other side, there was the INE’s formal structure, headed by the Sub-directorates. In the middle was the CEO, who tried to mediate between the groups and lead the INE. All this points to the fragmentation of decision-making, given the existence of this parallel-group that competed with the INE’s formal structure of decision-making, and the lack of formal responsibility, since there was no accountability over those decisions. Similarly, policy failure literature pointed out this complicated situation, Gerodimos describes it this way:
“significant decisions were based on (confidential) expert advice by (unelected) civil servants (under oath of secrecy) with minimum consultation.” (2004, p. 922)

The INE is an organization that values technical knowledge above all. Neither Labbé nor his advisers (except the CEO) were able to earn the respect of public officials and managers. The environment was rife with mutual animosities, with team Labbé distrusting INE officials, institutional inertia, and the organization’s increasing politicization. Likewise, INE officials doubted the technical inability of the Labbé team and its derogatory attitude toward the experience of INE professionals and public sector values.

Despite the CEO’s mediating efforts, the tensions between the Director’s team and the rest of the INE increased. Little by little, the Director’s team became isolated and all decisions, even the more technical ones, were made by this small group of people: the Director, the head of census, the CEO, and Labbé’s advisers. The existing conflict between groups led to the cessation meetings and other instances of technical work; one INE high executive commented about the census meetings: "I arrived at the INE, but the census committees had already dissolved; now the committees were only Labbé, Mariana [the CEO], Mathews [advisor], and Carrasco [head of census]." Likewise, another INE interviewee referred to a similar situation in the case of the CPI: “then they met about a problem with the CPI, and they did it behind closed doors. Only the advisers of Labbé participated but nobody from the technical team!"

Thus, the milieu of the 2012 census was notable for the mistrust and power struggles between groups. The different expressions of these tensions were: hiding information (e.g. emails or memos that were sent only to some and excluding others), making decisions behind others’ backs (e.g. without consulting experts, bypassing those formally responsible, not
inviting some key officials to essential meetings), and heated technical discussions (with shouting and even insults). As the census problems became more visible, secrecy and conflicts between groups were more intense.

No doubt, the critical moment was when, instead of recognizing data collection problems and poor coverage, Labbé and his closest team performed data imputation without solid technical foundations leading to what the interviewees called the "cloning" of houses and people. For most respondents, this was a clumsy and irresponsible attempt to hide real problems and "disguise" the census poor results; for other actors, it was a malicious and corrupt action in the face of imminent failure. The analysis of the case reveals that along with firing the head of the Technical Sub-directorate, the data imputation was "the final straw" that triggered the public letter from INE officials and the whole accusation of data manipulation in the media. The following quote from an INE official expresses some of the tensions mentioned:

That was Labbé’s big mistake! He despised the people of the INE because he is a right-wing guy, who does not understand public administration. A right-wing person thinks that people in the public administration are stupid and mediocre and he [Labbé] never thought that we were going to discover the errors in the imputation, with the cloning of homes and people.

7.6. Decision-Making and Groupthink

Another critical element that emerges from the analysis of the case points to decision-making dynamics and their role in the census failure. The way how Labbé and his close working team operated possess features of what social psychology literature called groupthink, a particular mode of thinking of small, cohesive groups that leads to suboptimal decisions when under pressure (Janis, 1982). Usually, small groups tend to share values and
seek agreements, but what is characteristic of the groupthink, is that, under certain circumstances and conditions, the unity of the group and the existence of a conflict trigger the collective over-optimism, lack of vigilance, and sloganistic thinking that finally lead to flaws in decision-making (Janis, 1973; ’t Hart, 1990; Stern & Sundelius, 1994).

It is worth remembering that several works on failure offer concepts close to the idea of groupthink, such as the “arrogance of the Whitehall” (Dunleavy, 1995), “overconfidence” (Cortázar, 2015), “culture of secrecy” (Gerodimos, 2004), “overvaluation and wishful thinking” (Parker et al., 2009), among other characteristics—or even pathologies—of decision-making groups that lead to policy errors and failures. Thus, the question about the role of decision makers' attitudes has been a permanent concern of the policy failure literature. However, the conceptual richness of groupthink—definitions and categories—allows for a more in-depth analysis.

There are three key characteristics of groupthink that are consistent with the census case: (i) decision makers conform to a small and cohesive group, (ii) there are structural flaws in the organization (such as insulation of the group, lack of tradition of impartial leadership, homogeneity of members), and (iii) a provocative situational context (high stress from external threats) (Janis & Mann, 1977; ’t Hart, 1991). The first element is establishing a small, closed group (Labbé, his advisers and the head of census) at the top of the INE with authority to make decisions. Second, is the aforementioned institutional fragility, represented by weaknesses in the leadership, lack of technical autonomy and formalization. Last: the threat of the student movement in the first right-wing government after 20 years of center-left governments. Hence, these conditions facilitated a concurrence-seeking tendency of group
members. This way of thinking is then expressed in groupthink symptoms and thenceforth in
defective decision-making.

There are several groupthink symptoms observed in the census case. An expression of
the overestimation of the group is *the illusion of invulnerability*, as a perception “shared by
most of all the members, which creates excessive optimism and encourages taking extreme
risks” (’t Hart, 1991). Labbé's young advisors had no experience in the public sector and did
not have the status of civil servants, so their decisions had no accountability and no formal
consequences. Different interviewees remarked that Labbé and his team were convinced of
the census’ success; from their perspective, all the effort would mark a modernizing
milestone in the INE and Labbé would be the best INE Director in the history of the country.

Another expression of groupthink is *the belief of the inherent morality of the group*,
which encourages the members to ignore the moral consequences of their decisions (Janis,
1971). This characteristic is most evident in the case by the hiding of information, the
dubious imputation models performed, the presentation of the census results in an equivocal
way, as well as the denial of errors committed. Groupthink states that people with good
intentions can end up making terrible decisions and behaving in unethical ways. Some of the
interviewees captured this very situation: "I am sure that Labbé didn't act like that to harm
anyone, I am certain. Labbé acted like this for his ego and was very badly advised by two
silly little boys." On the contrary, other interviewees attributed responsibility to a lack of
ethics, as made explicit here, "then what happened in the INE was that the perfect storm
began to form, between wrong decisions of the past, the personalities of the current
management, and the advisers' lack of ethics."
Regarded close-mindedness within the group, another groupthink symptom is the **rationale**. It refers to a collective effort to construct plausible justifications to discount warnings and other forms of negative feedback, which might lead the member of the group to reconsider their assumptions (Janis, 1971). Concerning the census problems, there were numerous warnings about the risks of the methodological change, other difficulties of the implementation (resources, training, data collection), and also about the poor quality of the data obtained. However, the reaction of Labbé’s team tended to justify decisions already taken. For example, when the coverage problems emerged and INE officials warned about the significant backlog, Labbé's team argued that it was due only to data entry delays. On the efforts to warn about the problems, a former senior INE official declared, "the one who makes the most controversial decisions is Mr. Labbé ignoring the technical precautions that we raise" (Cámara Noticias, 2013b).

Likewise, another symptom of groupthink is the **exaggerated and stereotyped views of rivals and enemies**. Members of the in-group may convince themselves that out-group members “are so evil that genuine attempts at negotiation of differences with them are unwarranted, or they are too weak or too stupid to deal effectively with whatever attempts the in-group makes to defeat their purposes, no matter how risky the attempts are” (Janis, 1971, p. 86). This characteristic is very prevalent in the census case, from Labbé’s and supporter’s perspective, the vast majority of actors—INE managers, officials, international organizations, and even the members of the first evaluation commission—were considered enemies, actors of the opposite side with the clear intention of destroying the census for political reasons. Several interviewees referred to Labbé and his team's disregard for the INE’s technical
expertise and a clear disdain for the rules of public administration, which reinforces their perception that all out-group members were incapable.

Additional symptoms of groupthink refer to several pressure mechanisms on the uniformity of the group including *self-censorship, illusion of unanimity, direct pressure on dissenters*, and also the emergence of *self-appointed mind-guards to protect the group* from adverse information that might shatter their shared complacency about the effectiveness and morality of their decisions. The analysis confirmed the existence of these symptoms, for example, the actions designed to discredit the findings of the national commission, the concealment of information to the Minister of Economy and Director Labbé himself. Regarding the latter, some respondents emphasized how protected Labbé and the government were from truthful information, as expressed by one interviewee, “their own people hid information from them; they told them a very nice story. They did not tell them the truth.” Also, there were several actions to block dissenting opinions, such as hiding information, as one interviewee pointed out: “during the data collection, the control and supervision was carried directly by the census team, and it was hidden from the technical Sub-directorate.” Similarly, the INE decision-making and leadership evinced groupthink symptoms, observable from the time of the strategy change until the period of evaluations and investigations.

In the context of an agency like the INE and a Director with significant power, there was a miscalculation about the INE’s capacity to implement the census, especially under a new strategy that was entirely unknown for all the actors involved. Labbé had only been in the INE a little over a year, and neither he nor his closest advisors knew the INE well enough
or understood the complexity of the census endeavor. All these facts show that the census was addressed from a fragmented institution with a high level of internal conflict.

This chapter reviewed the 2012 census case using the organizational lens, focusing on the INE elements that influenced the failure of the census. The analysis revealed an INE with a professional reputation, but whose greatest value is their public servants motivation, their high commitment of its officials with the generation of public value. However, it also revealed several organizational and management weaknesses: delays in modernization processes, lack of leadership, organizational rigidities, and the marginality of the census project. Thus, in the context of institutional fragility, the Labbé administration and decision-making style sharpened tensions between INE work teams, which along with the dynamics of groupthink, accounted for an organization in crisis at the time of the census. All this evidenced a precarious organizational scenario, where the INE could not generate the necessary safeguards on the change of strategy or ensure adequate implementation of the ambitious new census. Below, Diagram N.12 synthesizes the central element of this chapter according to three areas: values and goals, organizational flaws, and organizational dynamics.
Diagram N.12. Analytical Keys from the Organizational Lens

Values and Goals

- Historical prestige & technical reputation
- High commitment to public value
- "The INE family"

Organizational Flaws

- Lack of political autonomy
- High Director’s influence
- Complex organizational structure
- Lack of formalization of practices
- Absence of permanent census unit
- Rigidities & labor precariousness
- Low capabilities & self-esteem
- Lag in modernization processes

Organizational Dynamics

- Director lack technical & management skills
- Lack of collaboration & conflicts between groups
- High Levels of politicization
- Deterioration of the organizational climate
- Parallel structure of decision-making
- Isolation of INE authorities
- GroupThink
CHAPTER 8
POLICY FAILURE. ANALYSIS FROM THE SOCIETAL LENS

This chapter analyzes the case of the 2012 census in Chile through the societal lens, paying attention to elements of the political, social, economic, and institutional contexts affecting the failure of the census. This third lens focuses on the societal context—the country of Chile—as the unit of analysis relying on sociological, neo-institutionalist, and institutional logics literature to observe the role of the context and institutions on ideas and practices.

Literature has focused on the causes and characteristics of failure but not the broader context of where failures occur, leading to a limited and causal comprehension of policy failures (Hindmoor & McConnell, 2013; Peters, 2015; McConnell, 2016). Thus, “to say, therefore, that one factor alone is the cause of a failure, would be to neglect the range of individual, institutional and societal factors that interacted to produce that failure—as well as their complex interdependencies” (McConnell, 2014, p. 4). This dissertation addresses this deficiency directly, placing one of the three lenses over those contextual elements that contribute to understanding the census failure.

The context is broad and complex, and therefore, difficult to capture and interpret. Aligned with the Lenses Framework, this dissertation does not attempt to cover all the elements of the context, but only those that emerged as significant to understand the circumstances, characteristics, and interpretations about the failure. This chapter is devoted to
the four following features of the context of the 2012 census: the political context, the new 
rules of the game, census and statistical institutionality, and the clash of logics.

8.1. The Political Context

Research has shown that the political dimension plays an essential role in the success 
or failure of policy, and different approaches incorporate the political aspect as a cause or 
expression of failure. For example, support or lack of support from stakeholders can lead to 
failure; there are also blame allocation dynamics and electoral gains when a policy fails. 
Furthermore, a failed policy can trigger damage to a coalition's electoral reputation or even 
governance crisis (Weaver, 1986; Bueno de Mesquita et al., 1999; McConnell, 2010a). The 
societal lens does not focus on the political dynamics at the policy level but the political 
context in which the census deployed. This points to the historical contingency that 
recognizes that processes must be understood from moments of time and specific 
environments, since "economic, political, structural, and normative forces affecting 
individuals and organizations are indeed historical contingent (Thornton & Ocasio, 2008, p. 
109). Thus, this section delves into some characteristics of the political dynamics and 
political–institutional configurations. 

Regarding the political situation, Chileans elected Sebastián Piñera with 51.6% of the 
votes in the second round (SERVEL, 2020). He had the support of the alliance of center-right 
parties "Coalición por el Cambio" (Coalition for Change) better known as the "Alianza" 
(Alliance), formed by two parties, “Renovación Nacional, RN” (National Renewal) and the
“Unión Demócrata Independiente, UDI” (Independent Democratic Union). Piñera was and still is one of the wealthiest people in the country, heading in 2010 the first right-wing government after 20 years of regimes from the center-left coalition of parties, Concertación, who have stayed in power since the recovery of the democracy in 1990.

With a clear tenor of private-sector efficiency and a managerial style, Piñera’s government emphasized the de-bureaucratization of the state and efficiency toward the social and economic development of the country. Thus, Piñera began his government with an opening pitch of excellence; he stated: "In 20 days I feel that we have advanced more than others, perhaps, in 20 years" (Cooperativa, 2010). Consistent with these ideas, rather than a presidential cabinet with political experience, their ministers were prominent personalities from the business world and academia, with the idea of having the cabinet "of the best" (Segovia & Gamboa, 2012). From this logic, the appointment of Francisco Labbé, an academic and economist from the University of Chicago as head of the INE, was not surprising.

Piñera's government began by facing unexpected situations. First, coping with the devastating effects of the February 2010 earthquake—an 8.8 magnitude on the Richter Scale—and ensuing tsunami, and a few months later, with the accident of the 33 workers trapped in a mining operation. Regarding the latter, the Minister of Mining Laurence Golborne and the President himself led the successful rescue of the miners after 68 days trapped underground in what was a major engineering feat and a global media event (The

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29 RN is a liberal-conservative party, and UDI is a national conservative party based on the “Gremialismo” or guildism movement ideas (Catholic social teachings).
New York Times, 2010). These incidents occupied the agenda during the first year of the
government, but the second year's main characteristic was the diverse citizen protests,
especially the student movement that began in May 2011 (Segovia & Gamboa, 2012).

From the perspective of symbolic language analysis, Yanow (2000) offers the concept of “metaphor” which goes beyond a figure of speech or literary device, but as a way of understanding and acting; as she describes: “uncovering the metaphoric roots of policy or agency language and acts is one way of discovering the architecture of the policy argument” (2000, p. 43). From here, the ideas of “the government of excellence” and “the government of the best” worked as powerful metaphors. Thus, changing the census method and making it "more professional and of better quality" as well as the idea of “the best census of the history of Chile,” worked as an example of the new government policy style. Accordingly, for the interviewees, the change of census strategy was consistent with this government’s values and policy agenda.

Complementary to the concept of metaphor, but focusing on a broader understanding, the neo-institutionalists Meyer and Rowan (1977) propose the concepts of “myths,” those beliefs taken for granted, shared values, meanings that provide legitimacy and shape practices and routines. The authors explain, “Institutionalized products, services, techniques, policies, and programs function as powerful myths, and many organizations adopt them ceremonially” (p. 340). Thus, the metaphors of excellence and the census as a modern and efficient public endeavor expresses a “myth” that the government practiced that confronted traditional beliefs to gain legitimacy.

This idea of “excellence” is strong in testimonies, speeches, and documents of the census. For example, in the short memorandums and presentations used to endorse and
“defend” the census strategy change in different instances—before the Minister, the President, and the National Census Commission (Alcérreca, 2011a, 2011b; INE, 2011b, 2011a). These "artifacts" emphasize the advantages of the new modality and frame the new census with the prevailing discourse of efficiency. The memorandums highlight the benefits of the new format: 1) An additional cost of US$13 million while the country would save approximately US$180 million because of the elimination of the holiday. 2) Improving coverage as there is a reduction in the risk of censusing with volunteers. 3) Better data collected through better-trained, better-paid census takers. 4) Places Chile at the level of most Latin American countries regarding census modality (Alcérreca, 2011a, p. 4,5, 11). Documents also mentioned difficulties of the new strategy, but without giving adequate weight to the complexity entailed, as shown in the following quote: “the main risk is the understanding of the concept of habitual residence, which is controllable with a good design of the census operation, the training of census takers and communication to the population” (INE, 2011b, p. 5). Similarly, Director Labbé utilized the idea of "the best" when he announced the new census strategy: "this decision was adopted after the INE studied for several months the advantages of this change, which are summarized in better quality of information collected, greater coverage, greater security and lower costs for the country” (La Tercera, 2011).

The specific configuration of the policies also conveyed significance, as Yanow described, “policy meanings are often communicated and interpreted in such detail as the activities, programs” (2000, p. 71). Therefore, the emphasis on saving resources or the limited importance of the new strategy's risks reflects the understanding of the census endeavor. Thus, the 2012 census embodied ideals and myths of a new way of governing and doing policies, steeped in enthusiasm and a genuine conviction that it would be a much better
census than censuses in the past. Other examples where the census expressed these meanings were: the outsourcing of the recruitment of census takers to a private company, the emphasis on professional pollsters, the phrase of the President about "the best census in the history of Chile," and the INE announcing the successful historical census coverage.

In the context of the government’s ideas of excellence, another relevant antecedent for the census was the controversy over the poverty measurement figures, known as the CASEN polemic. Regarding poverty measurement, in the last decades, CEPAL (UN) used to play an essential role in data processing and mainly to ensure the comparability of the poverty figures. However, during the data processing of the CASEN 2011 survey data, the Social Ministry of Development asked CEPAL to include a new variable that finally improved the figures, from 15%, the same as in the previous administration, to 14.4% poverty. Then, and without CEPAL approval, authorities presented the statistics and announced the decrease in poverty as a great achievement of the Piñera government. The episode was a huge technical dispute that pitted CEPAL against the government. The crisis led to CEPAL’s refusal to continue collaborating with the government on the survey and sparked a wave of criticism from the academic community questioning the delivery of results and demanding transparency about the methods (El Mostrador, 2012; CIPER, 2012b). The reactions did not wait; The Economist raised the question of manipulation of poverty figures, “whether the center-right government of Sebastián Piñera has fiddled the poverty numbers to flatter its economic record” (2012); likewise, an influential columnist openly asked: “Is the president lying about CASEN? [...] Did the government cheat?” (Peña, 2012); another analyst stated, "the political and communicational lack of expertise of the government is
trying to pass off an (at least) neutral data as a sort of national historical achievement” (Diaz, 2012).

The CASEN controversy confirmed and intensified the existing distance between the UN agencies and the Piñera government; something that had never happened in previous administrations. Some signals of this distance were: first, the lack of CELADE’s consultation or involvement in the decision to change the census methods, then the conflict over the poverty figures, and later, the absence of CELADE support or expert advice in the census data processing. Regarding the lack of collaboration with CELADE, an INE interviewee referred to the political element in the relationship with the UN: “I believe that for some reason, the right-wing has animosity towards international organizations; they think that it is full of communists, and that's why they don't relate to them, and that's a mistake.”

The problems of poverty data in 2012 and census figures in 2013 are linked with the idea of the government of the best, expressing a particular understanding of the role of data to present government achievements to reinforce this idea of excellence. In this line, a senator declared, “the ruler [Piñera] has pushed governmental actions towards collapsing goals and uncontrolled actions that seriously damage the public system and the prestige of the State. What happened with the 2012 Census is no coincidence” (Senado Prensa, 2013a). Likewise, a prominent economist referred to the obsession for excellence, “the obsession of the government to show that they are not just a good government but that they are the best in history has led them to push too much the presentation of figures that have caused damage to their credibility and weakened the statistical institutions” (Emol, 2013). Similarly, a political analyst stated, “[President] Piñera has been obsessed by trying to be the best government in
the history of Chile, and he played with the numbers a bit, not by changing them but in the way they have been presented… sugarcoating [them]” (Financial Times, 2013).

Thus, the enthusiastic beginning of the government in 2010, with the president's high popularity after the successful and mediatized rescue of the miners, contrasts with managing problems, increasing controversies, and the growing social demands in the streets.

The characteristics of the political system in Chile are another relevant institutional feature to understand census failure. One of them is the above-mentioned exaggerated presidentialism, resulting in a high capacity of the executive branch in advancing or delaying law initiatives (Fuentes, 2015). Another characteristic of the political system is that since 2006, and as a way to reduce presidential powers, governments went from six years to only last four years without reelection, which has sharpened a short-term policymaking perspective.30 Although actors recognize the importance of leadership turn-over for a healthy democracy, there is an agreement among interviewees from different political views that this particular configuration of the presidential period, is harmful to public policies’ quality.

Pointing to a lack of medium-and long-term vision in the INE, an interviewee, noted, “Without re-election; you can't even install yourself when you have to leave.” Some of the difficulties that such a short-term government entails are immediate objectives, lack of planning, abandonment of policies that have no political return, and disconnection between

30 Since the restoration of democracy in 1990, the length of government has changed in Chile. Given the post-dictatorship "transitional" character, the term for President Patricio Aylwin was four years (1990-1994), then Presidents Eduardo Frei and Ricardo Lagos six years (1994-2000 and 2000-2006, respectively). But then, the reform in 2005 reduced the presidential term to four years without re-election in the following period but allowed in the subsequent one.
policy design and implementation. A former minister pointed out the harmful consequences of the four years on government agencies: “time is not enough because between evaluating and deciding what to do, time passes. Governments are so short, four-year governments without re-election, is fatal!” Similarly, the following quote from a former INE high official explained this short-term perspective and its consequences:

There is no public policy able to transcend the four years if it is not glamorous. A policy like this to build [a better] INE, is going to bear fruit in eight years or maybe more, so they [government] answer: perhaps later, we're going to put it in tenth place, it's not a priority. Somehow, this is a metaphor, but they need to cut ribbons, it's what a minister does, that is, they don't make long-term public policies [...] four years is a straitjacket.

Another effect of four-year governments is that it intensifies electoral competition. The presidential race is extremely intense, which also influenced decisions about the census. For example, the importance of showing the government’s seal through a more efficient and modern census, and the crisis management once the polemic was uncovered. Regarding the control of the census polemic—from the first accusations of data manipulation and inquiry commissions—a critical context situation was the political instability and electoral tensions of the governing coalition. Four moments attest to this instability. First, the prospective presidential candidate Laurence Golborne, the key actor in the rescue of the miners, dropped his candidacy due to the uncovering of situations concerning his lack of probity (Diario UChile, 2013b). Second, the Minister of Economy, Pablo Longueira (in charge of the INE), emerged as a new presidential candidate, which left the INE without a minister in command. Third, after winning the primary elections, Longueira dropped his presidential candidacy because of a severe depressive condition, leaving the Alliance coalition without a candidate to compete against Michelle Bachelet for 2014-2018. Finally, only four months before the
presidential elections, Evelyn Mattei—former labor minister—became the right-wing candidate (El País, 2013).

As noted, the political context under which the census polemic emerged was disturbed by the political climate, and therefore government authorities ended up ignoring the warnings about census problems. They did not grasp the seriousness of what happened in the INE because the political pressure was enormous, and the government needed to show results. Regarding the government's lack of awareness of the INE struggles, an analyst pointed out, "In those days, La Moneda [government palace] was more focused on the internal conflict on the right." (Jimenez, 2013b).

8.2. The new Rules of the Game

Aligned with the notion of “setting”—as the background or scenario with particular values and norms where the failure episode unfolds (Oppermann & Spencer, 2016a)—there are relevant elements of the context of the census constituting this institutional setting. Compared to the 2002 census, the setting under which the 2012 census deployed was very different, including some “new rules of the game” for public administration. Particularly noteworthy are new institutional regulations of the Chilean State and the influential role of social media.

The first institutional transformation is the 2008 transparency law. Like other countries in the region—such as Mexico, Colombia, and Uruguay—Chile implemented a legal and institutional body to prevent corruption, promote transparency, and guarantee citizens’ rights to public information (Olavarría-Gambi, 2012). The regulation demands all public agencies actively provide information about their policies, activities, and funding, and any
citizen can request additional information about the state's actions, which is guaranteed by law (Transparencia, 2020). For the interviewees, the transparency law marks a turning point. Transparency regulations brought additional pressure to public agencies because all technical decisions and activities were required to be appropriately substantiated and transparent, which challenged deep-rooted practices. An INE interviewee referred change as follows: “today everything is freely accessible, so you have to prepare and present the database for any researcher to review, and therefore it must pass the ‘test of whiteness.’”

The case evinced a tension of practices due to the demands of the transparency law in different moments of the census policy, such as the decision on changing the census approach, hiring, the presentation of results, data processing, and the dubious imputations situation. INE Interviewees remembered deep-rooted disagreements and discussions regarding transparency demands, as a senior INE executive recalled, “Labbé never wanted to understand the issue of transparency, never! And we warned him. I told him 10, 20, 50 times.” The following excerpt, from another public official, reflected on how this new context put pressure on the 2012 census:

There is a huge difference between this census and all the previous ones: the transparency law. I can tell you that most likely, even old censuses have done similar practices in many statistical products. Still, those databases were not deliverables, were not public, and in this census, the database was going to be open access. So that is a risk they [INE authorities] didn't control, and that's the risk we warned them, saying: You know what? When this database became public, we're going to get caught. This can't be!

Hand-in-hand with transparency, another element of this setting, is the public procurement law enforce since 2003 (Ley N.19,886, 2003), which created a public purchase system, called "ChileCompra," which regulates all contracts and transactions paid by the
State through standardized procedures (ChileCompra, 2020). As with the transparency law, the existence of the acquisition system highlights the differences in the institutional contexts under which the 2002 and 2012 censuses operated, as an interviewee said: "I can't just go in there and decide what I want to buy and talk directly to a supplier, no, I can't do that! It works differently now." These differences became even more constricting, given the lack of planning and the limited time to prepare the census. Alluding to the time pressures and the purchasing norms, an INE interviewee said, "when you have to bid the times are very definite and you have to follow them, there was no option to get out of ChileCompra.”

Unlike older INE public officials knowledgeable of public administration demands and times, and used to working under the procurement regulations, the newest INE professionals usually come from the private world with different practices and expectations regarding purchasing, and especially timing. Interviewees reported many arguments within the INE regarding how to deal with procurement regulations and transparency, revealing a significant difference in ideas and values. Thus, while for INE officials following the regulations was mandatory and accounted for openness and public probity, for the others, the rules were perceived as bureaucratic impediments, especially given the scarcity of time. As described in the case, later inquiries revealed that the 2012 census failed to comply with several hiring and procurement rules.

Another significant context phenomenon that impacted the census is the rising power of social media. Interviewees acknowledge that social networks—such as Facebook and Twitter—on the 2012 census were much stronger than expected. An interviewee stressed, “they never imagined, in the INE, …that [social media] would explode and that year it did explode, because nobody was aware of the power of the social media gained from that time.
on.” Thus, the always vigilant social media tend to be much more sensitive to problems and difficulties, and the 2012 census wasn’t the exception. An INE interviewee remembered the permanent pressure of different problems spreading out in minutes through social media, “now people are much more aware of what fails or doesn't fail, they don't care if you're successful, but if there's something wrong, it's a seed, it's very effervescent;” another interviewee pointed out “It's a different world, it's a world where the news runs super-fast, it's super easy to belittle through social networks.”

This new social and institutional context—transparency and procurement regulation, social media—exerted enormous pressure on the census, making the census task more complicated than in the past. The following excerpt of an INE interviewee illustrates this idea,

The INEs are used to hiding these issues ‘under the carpet’ in Latin America. For example, in the past, there was no context in which, due the transparency law, all salaries must be published; due the transparency law, we have to count on all the information that you give me, otherwise it is going to be a twitter chain saying: ‘I have not been censused, I have not been censused.’ In 2002 nothing like that happened.

There is a saying among demographers and statisticians: "There is not a perfect census." Despite low omission rates and people's good opinion about past censuses in Chile, indeed they had some problems. For example, the 2002 census had difficulties in recruiting volunteers and significant omissions in specific areas on the census day that needed recovering. Interviewees who participated in previous censuses acknowledged that, by today's standards, there have also been non-transparent data processing practices in the past. A government interviewee referred to this, “I believe that, before, there were even more serious errors; however, now it is much easier for an error to go viral.” However, the new
scenario has no room for old practices, as an INE interviewee stated, “when you have a power like the one that social media has now, which is evolving faster and faster: ultimately, you cannot hide information, you cannot think that no one will talk to each other.”

Therefore, censuses always had several logistical and methodological difficulties. In this line, President Piñera declared, “and all censuses, also in 1992 and 2002, had many problems [...] but no one knew, and no one discussed it” (BioBio, 2013). Nonetheless, transparency demands and social media have changed the way to consider and confront census challenges, since any difficulty or mistake is now available to find and disseminate.

8.3. Census and Statistical Institutionality

Institutions are powerful forces affecting the structure and dynamics of relationships of organizations and individuals. From the societal perspective, another critical element to understand the failure of the census is the statistical institutionality and the role of relevant organizations.

United Nations agencies and regional statistical communities constitute relevant institutions to understand the census case. The UN is the most influential organization in demographics and censuses matters worldwide.31 Countries all over the world follow UN population and statistics recommendations, use their detailed handbooks and engage in international working groups. In general, there is an abundant exchange of methodologies,

31 Some of the agencies are: United Nations Statistical Division (UNSD), United Nations Population Division (UNPD), the United Nations Economic Commission for Europe (UNECE).
and experiences between countries (UN, 2013; UNECE, 2015; UN, 2019). In Latin America, the relevant agency is the Latin-American Center of Demography (CELADE).

However, the 2010 census round was marked by significant difficulties to the extent that Latin-American demographers called it "the lost decade" because, despite having many favorable macroeconomic conditions, the region wasted the opportunity to conduct good censuses (Villacis, 2017a). As said by an international expert,

The last census round is the one with the most significant errors: just look, Paraguay crashed, Chile crashed, Peru crashed, Colombia basically is a repetition, Brazil has errors that they do not admit, but has errors, Venezuela is unknown because it has been a gigantic mystery.

Thus, the 2012 Chilean census was not the only failed census in the region during the 2010 census round. Uruguay, Paraguay, Bolivia, Colombia, and Peru, among others, also had problems of a different nature (complementary information regarding Latin American censuses is available in Appendix N.7). Following is a brief analysis of the census problems in some countries of the region.

Bolivia also had problems with the 2012 census. The difficulties started from the configuration of the forms and its questions, and sharp criticisms for lack of participation, then continued with severe problems in the enumeration process. A regional expert noted, "they also had many problems, perhaps not so much in census omission, but mostly quality. That's why I’m telling you, ‘coverage and quality’ because you can have a 1% omission, but all the variables may be badly declared.” Just as had happened in Chile, in Bolivia, the academic community affirmed: "the census was a failure," stating, "We will never know the census omission and even less the quality of the answers given by the population, because
among other defects, the training of enumerators was improvised. In reality, the entire census was improvised” (Pereira Morató, 2014, p. 200).

The 2005 census in Peru also has similarities to Chile, and citizenship and stakeholders also framed the census as a failure. The country went from the de facto toward de jure methodology, having various troubles in data collection. Census results revealed severe omission problems (over 7% estimated at the time) and very high numbers of unoccupied dwellings (18% versus 4% from the previous census) (La República, 2006). All Peruvian actors, including the President, criticized the census results, and ultimately, the country repeated the census in 2007, this time under the de facto approach achieving an omission rate of 5.9% (Villacis, 2017a).

The case of the census in Uruguay is paradigmatic since it is a small country of 3 million people with a high level of education. Still, they had many problems implementing their de jure census in 2011. A demographer interviewed recalled: "The census had a pile of problems. There were places where they couldn't go because they didn't have people to go. Then the census spread over so much time that nobody cared anymore." However, the Uruguayan Statistic Institute faced the problem on time, as the UN officer stated, "we are using the census data, but for them, it was a disgrace in terms of the historical quality of the censuses they always have had."

A different situation was the 2010 census in Argentina, which shows the vulnerability of a de facto census. On the day of the census, the former President of the nation, Nestor Kirchner, died, which caused social disorders that affected the census implementation. So too, the parallels with the Chilean case are noteworthy: the idea of failure, the general distrust, and endless debates regarding data quality obtained. In this line, Sacco pointed out,
"In Argentina, the affirmation 'the census is a disaster' is frequent among journalists, people on the street, academics and occasional or frequent users of census data" (2015, p. 1). Also, this expert drew attention to the absence of a thorough review of what happened, “there was no official evaluation of the 2010 census by the statistics institute. Chile performed two evaluations of its census, but Argentina did not run an official one.”

In 2005 Colombia tried a new census methodology, incorporating technological advances (Personal Digital Assistant, PDA) and significant conceptual and operational modifications. However, the country was not prepared, an expert interviewed remembered: “the new director was convinced that new technologies were everything, so he wanted to conduct three censuses in one, population, agricultural, economic, and he couldn’t perform any." Added to several difficulties in the supervision of the census, the enumeration extended for over a year, bringing additional complications regarding the comparability of data (DANE, 2014). As in Chile, the Colombian census problems led to political confrontations, and in general, stakeholders did not legitimize the census despite a special commission identifying reliable data (Villacis, 2017a). Given the previous failure, Colombians had high expectations for the 2018 census. This time, with the omission of 8.5%, the census also had difficulties. Some problems detected by a commission of experts were: budgetary limitations, absence of a pre-census, poor training, a long period of enumeration (10 months), inadequate monitoring systems, and connectivity difficulties (DANE, 2019a, 2019b).

Undoubtedly the most dramatic case is the 2012 census in Paraguay, with a 24.6% omission rate (Ruiz, 2016). Paraguay made significant changes: from a one-day enumeration to a three months’ census, from the census with volunteers to paid census takers, from a paper questionnaire to the use of PDAs. In the opinion of the experts interviewed, the census
was adequately prepared. However, the intense political crisis—that ended with the deposition of the President—and subsequent change of government, diminished the support for the census, especially regarding the timely availability of resources, leading to several enumeration problems (Ruiz, 2016). Referring to this case, an expert interviewee narrated, “the census was broken. It was not possible to carry out the plan exactly how they prepared. The census in Paraguay went into tremendous chaos. It's a very painful story.” There were also technical difficulties, such as lack of experience in de jure censuses, inadequate training in new technologies (PDAs), and a dearth of logistical planning adapted to the new format (Villacis, 2017a). Despite the idea of repeating the operation, census data were finally used. An expert commented, “the census worked as a large sample. So, the census wasn’t useful for many things, but served to estimate fertility, mortality, migrations, and to update population projections.”

As observed, the way countries dealt with their census problems was critical to fix census data. In this line, there were political and technical efforts to address census problems, most of them with the critical support of CELADE. However, the 2012 census in Chile didn’t have that support because of the government's distancing from international agencies. The following excerpt from an INE official stresses how negative not relying on UN support to confront census problems was:

Paraguay and Uruguay saved their censuses because they worked with CELADE. However, [in Chile] here they hid from CELADE what they had done, and the procedure was so fast and so gross statistically, that CELADE realized the wrong data estimations, because of course, everything was super inconsistent! Instead of having them by your side, explaining why and trying to find ways to solve the problems. That is, countries explain these problematic issues, buy they [INE authorities] moved away from CELADE.
Consistent with the literature, the situation of censuses in the region reveal different yardsticks to measure and understand failure. As an INE official interviewed stated, "If you look at Latin America, there are censuses twenty times worse than the Chilean that were saved. Paraguay's census with 25% omission, and Bolivia's census was also saved." Thus, values, worldviews, narratives and history influence the understanding of what is policy failure, expressing a "cultural bias." Thus, the way Chile reacted to the census problems appeals to its values and self-perception in the light of expected quality standards. In this line, the following words from an international census expert illustrate the paradox of perceptions of failure that differ from country to country, highlighting the particular reaction—and quite exaggerated—of Chileans to their census’s failure,

The census in Argentina was much worse than the Chilean census. Still, nobody became hysterical because the coverage was bad [...] For me, that was the most curious thing [in Chile], the hysterical public reaction, because, for some, coverage was too good and for others, it was too bad. I didn't understand that, especially in a continent where all the censuses were bad, starting with those censuses with adequate resources, like the Colombian, which was bad, much worse than the census in Chile [...] and then saying they [Chileans] are performing a new census with the same people, without time to list all the errors, or to know how to correct them; that seemed to me, from the public policy point of view, the most ‘curious’ thing. It is exceptional because there was no statistical tradition to do it, there were not even economic means to do it, and yet everyone [in Chile] was convinced that there was no other way forward!

On the relevance of the context to understand failures, the evidence shows that the 2012 census in Chile is not an exceptional case, but another expression of the difficulties with censuses in Latin America. The Chilean census wasn’t the only one with problems and indeed not the only framed as “failure.” As stated by an INE official interviewed,
All the countries that have done it [the methodology change] the first time have gone to hell. That's a fact; it's not just Chile [...] all the countries have gone to hell. And it's because there's no expertise, because they didn't work it before. They didn't do the previous work.

The censuses’ problems in the Latin American region are linked to institutional weaknesses. There is agreement among interviewees that National Statistics Offices (NSO) share severe fragilities: lack of funding, inadequate leaders, scarcity of professional capabilities, and lack of autonomy.

The lack of adequate funding for the statistical offices has been a persistent difficulty in the region. In part due to the economic instability of the countries, but according to the interviewees, it is also because of the low priority given by governments to public statistics. Consistent with this perception, evidence indicates that when countries value the importance of data, they are more willing to invest resources in statistical matters (Alessandro, 2017). Alluding to reliable statistics, an INE interviewee stated, "we have to invest in statistics because you realize that if you don't have quality public statistics, whether you're from the left or the right, the country could fall off.”

Other weak institutional features are the leadership and skills of the director of the NSO. For the interviewees, the professional profile and personal characteristics of the director are critical. Thus, added to the academic credentials, the NSO values a director that came from the institution itself (as happens in Brazil or Mexico), and with enough political abilities to handle the complex tasks of a statistical institute. So an expert interviewed pointed out, "how skillful the director is critical, especially with a capacity that I find very difficult to have, which is to deal with your own bureaucracy.”
Another regional weakness is the professional capabilities of public officials. On the one hand, interviewees reported a shortage of highly trained professionals, especially since CELADE ceased offering demography training. On the other hand, Latin American countries are not investing in their demographers and statisticians. Except for Chile—which has a state-funded scholarship program—or Brazil—which trains their professionals—the other countries are not investing in specialized knowledge. However, interviewees pointed out that there are some highly trained professionals, mostly educated in universities of Europe or the US, but it is getting harder and harder for statistical offices to attract and retain them. Low salaries, political instability, and poor working conditions—specifically lack of job security—disincentive specialists to stay in the NSOs. Referring to this situation, an interviewee claimed, "then, what happens is like a state policy, which systematically expels professionals, because they end up doing that, expels them, or does not form them, or does not attract them. They don't keep them; the salaries are very low."

There is agreement among interviewees that the main problem of the NSO is the lack of political autonomy and independence (legally and also in practice), which also appeared strongly in the Chilean case. An international consultant stressed this idea, saying, “the first key for me is—the one that does not exist in most countries—but the first is independence or autonomy.” Likewise, another expert alluded to the political factor: "there are also political tensions, countries where the institutes receive more pressure than others, or when government changes, the work teams disarm." An example of this situation was the 2012 census in Paraguay, where the political crisis and subsequent change of public officials, modified the entire census plan leading to numerous problems. Another example is Colombia, despite the technical reputation of the statistical office DANE, and considered by
the interviewees as one of the best in the region, it was susceptible to political pressures. An interviewee characterized it as having "a lot of vulnerability because the DANE is at the ministry level and the DANE’s Director is basically a minister, so any political fuse… you know that ministers very easy to change, so the DANE has that weakness."

Despite the weaknesses, interviewees agreed that Latin America's census difficulties have not been from technical expertise but institutional origin. These are the words of an expert from the Latin American Census Observatory (OLAC): “You can have the best statisticians in the world, you can have the best methodology, you can send people to the best demography programs, but if institutionally you have problems, the statistical operations will have severe flaws.” Referring to the implications of not having a strong NSO, the same expert points out:

Managing a statistical institute is 51% political and 49% technical, so you need technical references, you need a substantial background in methodological, statistical issues. However, if you don't have a political ability to defend that methodology, you fail. And falling in the best of scenarios, in the least hurtful, you lose your job, and that's it, but in the most harmful, you can drop a census, you drop a survey and affect the statistical programming of an entire country like the Chilean case.

The capacities of the NSO in Latin America are quite dissimilar, for example, in Colombia, "the high capacities of the DANE can be attributed, mainly, to a deep-rooted technocratic tradition in certain entities of the Colombian State" (Alessandro, 2017, p. 69), leading to a firm desire in maintaining prestige and confidence, despite difficulties in the 2005 census. In other countries, the precariousness of public statistics is deeper. For example, El Salvador, did not undertake a census in the last decade, and presents a severe problem of under-registered mortality. Similarly, other countries also have weaknesses in their registers, as a demographer interviewed stated:
Only regarding birth registration, you have no idea how big the problems are. Chile, Colombia, Ecuador perform well; however, what is happening in Brazil or Central America are very serious things because there are groups of much older kids, I'm talking about thousands of children, that are just registered at the age of two, three years old.

These institutional weaknesses observed by regional experts are consistent with the analyses developed by the Inter-American Development Bank IADB (Taylor, 2016; Alessandro, 2017; Beccaria, 2017; Dargent et al., 2018). They define “statistical capacity” as "the existence of a permanent structure or system that has the necessary resources to generate relevant and quality statistical data in a sustained manner, and to disseminate them in an adequate and timely manner" (Beccaria, 2017, p. 2). From here, the IADB analyzed the statistical capacity in ten NSO in Latin America, focusing on four key dimensions: resources, institutional, methods, and diffusion (complementary information in the Appendix N.7). Although the analysis did not include the Chilean case, the results reinforce the previous findings of this study, as stated by the report: “this institutional weakness is manifested through National Statistics Offices (NSOs) with scarce human, technological and financial resources, limited autonomy and technical weakness, which do not allow them to produce statistics under common criteria and in an integrated manner” (Dargent et al., 2018, p. ix).

Despite this interest on studying institutional statistical capacities in the region, the interviewees agreed over the lack of plans and funding to address the problems. An interviewee explained, “there are people working on how to improve projections, on how to improve questionnaires, technologies, but there is not work on institutional issues at the regional level.” Thus, experts had a rather pessimistic view of the future improvement of statistical offices in the region.
CELADE stimulates and facilitates a meaningful collaboration among countries in the region, and provides guidance and support in demographic and statistical matters. However, interviewees agreed that this UN institution had lost importance. On this decline, an interviewee said, “there is a perception that comes since CELADE stopped training demographers, no longer offered demographics courses, no longer trained, as it lost the prestige it had.” Also, interviewees agreed about the shortage of demographers and lack of generational renewal; in this line, another expert stated, "there is also a generational problem, they are very good, but they had their moment around twenty, thirty years ago.” Thus, for many, this lack of young demographers is accompanied by a lack of updating on demographic techniques.

In addition, some interviewees express discrepancies with specific CEPAL methodologies, in particular with census conciliation and population projections. The countries of the region rely on CELADE, leaving little room for other approaches and updates. In the opinion of one specialist, this "has caused a kind of lethargy, an absence of new methods or a new influx of demographers." Regarding these discrepancies with CELADE approaches, another expert pointed out:

CELADE is very well known for having its own method, for having its own vision of how to handle things and that is not the only way to do things in demography, it is disconnected, it is as if they were two parts of an island without connecting with the methods that are now used worldwide

Most interviewees highly value the work of CELADE and the support it provides to NSOs. As one interviewee pointed out, “this CELADE conciliation is very much appreciated because it helps to cover up the mistakes made by the institution that conducted the census, and this is done in many countries.” Several interviewees agree with this lag on demographic
issues, as one interviewee said, "I believe there is a general demographic crisis. It has nothing to do only with CELADE." Therefore, the tensions over census data processing are framed in these questions about CELADE methodologies, and apprehensions about its updating and leadership.

8.4. Clash of Logics

The case of the census shows that the street protests were critical for changing the census strategy. However, from the societal lens, the student movement, and its ideas, reveal a context of deep ideological disputes that affected the census policy. To better understand these dynamics, the societal lens relies on the literature of institutional logics. This perspective emphasizes the interrelations between individuals, organizations, and society under different and diverse "logics of actions" (Zilber, 2013). Thornton and Ocasio define institutional logics as: "The social constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time, and space, and provide meaning to their social reality" (1999, p. 804).

The demands and ideas of the social movement attest to the logics of action prevailing at the time of the census; therefore, from this lens of analysis, it is essential to delve deeper into the protest’s characteristics. The main features of the Chilean students' movement were: massive character (large crowds of protesters in the street), high support from citizenship, and its prolonged presence in time. The marches and mobilizations began in May 2011, and then, increased in number and intensity, the student movement's strength was impressive. Between April and December 2011 there were 122 days of marches and social protest actions.
(Fernández, 2013; T0, 2011), resembling the power of social movements in the 80s to recover democracy (Vera, 2011). Besides, the citizens firmly held the demands of the social movement. Public opinion measurement showed that 89% of Chileans supported the movement's claims and that education quickly became the country's most crucial problem—passing from 24% in May to 73% in August (CERC, 2011). The social movement remained active with mobilizations, proposals, and negotiations during the 2011 and 2012 years.

Unlike other similar social movements of that time—such as the Indignados in Spain—the emergence of the Chilean movement was not a response to specific economic or political circumstances. The students break out in the streets and the political agenda contrasting with the institutional stability and stable economy—the unemployment rate was under 7%, GDP over 5%, and controlled inflation (Banco Central, 2020). However, the emergence of the movement during Piñera's administration is no coincidence. He was the first right-wing president since the dictatorship, and also a businessman, governing with a managerial and technocratic style, lacking skills to engage with civil society, so in this way, representing the market values that were in question (Oyarzún, 2012). Also, Piñera's ideas were far from the citizens' demands, so far that his presidential plan proposed to maintain the current economic scheme: "This Government Program consolidates the bases of the social market economy development model, which has been successfully applied for more than three decades in the country" (Piñera, 2009, p. 15).

Thus, 2011 and 2012 were years of profound transformation, where the country faced radically opposing discourses and ideas. From an institutional logics perspective, that was a time of confronted logics of action. On the one hand, the student movement emphasized participation, social justice, accusing the inequalities of neoliberal market policies, and
claimed: "The end of profit" or "Education is not for sale," and also declaring “The failure of the neoliberal economic model” (Fernández, 2013; Vera, 2011). On the other hand, and contrary to those values, authorities offered partial solutions and more resources to improve education—under the existing model--; and the right-wing businessman President declared that education "is a consumer good" (T13, 2011).

The protesters were able to articulate the frustration and malaise of the citizenry against the system. They placed on the agenda problems which had persisted for a long time, most of which point to the inequalities caused by the market-oriented policy reforms implemented by the dictatorship, starting with demands over tertiary education32, but then extended to other areas such as health, pensions, and democracy (Vera, 2011). As Grugel and Nem pointed out, “it is fair to say that the radical demands of the student leaders resonate in Chile, precisely because they echo ideas about equity and justice that dates back to pre-1973 politics –albeit in a form updated for the contemporary era” (2015, p. 364). The claims pointed out toward a paradigm shift, a new way to understand society and face social problems. The following quote from a protesters organization illustrates the idea, “the citizens understood that this system no longer stands, and it is necessary a change of paradigm. Moving from education seen as a consumer good and financed by families, to education as a social right, guaranteed by the State” (CONFECH, 2011).

The strength of the social movement led to many debates and abundant scholarly studies, especially from sociology. The literature on the 2011-12 student movement identifies

32 Between 2005 and 2010 around 80% of tertiary education expenditure came from families, while the average in OECD countries was quite different: 70% public and 30% private spending. The latest data showed that private expenditure on tertiary education in Chile decreased to 68% in 2016 (OECD, 2019).
three explanations for their emergence: The first idea alludes to the stage of the country's socio-economic development, reaching a per capita GDP of over US$15,000 and the emergence of a more educated and empowered "new middle class" (Fleet, 2011). The second reason is the crisis of the neoliberal model expressed in multiple and growing inequalities. The third reason is the crisis of the political system, with limited representativeness and legitimacy (Luna, 2016). The latter two explanations are linked because of the political, economic, and institutional model established by the dictatorship (Vera, 2011; Oyarzún, 2012; Fernández, 2013). These explanations reinforce an underlying logic of action that emerges with the student protests.

From disappointment for unfulfilled promises and malaise for the inequalities, the student movement questioned existing ideas, values, and institutional arrangements, provoking a clash of institutional logics, which would grow and deepen the following years. The social movement opened the doors to protests of social discontent over the persistent inequality, which along with a process of detachment from established political parties and representative institutions, led to the politicization of disparities, and the emergence of new social actors demanding structural reforms to reduce them (Roberts, 2016). In the voice of one of the leaders of the student movement, "We realized the problem was bigger, the problem was structural […] The debate became about the link between education and the bigger economic model in Chile” (The Guardian, 2012).

33 These new social movements go beyond the reduction of the income gap, addressing other types of inequalities such as gender, social orientation discrimination, barriers of access to the justice system, indigenous rights, differential access to quality public services, among others (Castiglioni & Rovira, 2016).
In this context of malaise against public decisions and deep questioning of the current market-oriented policies, the INE proposed a "more modern, safe and professional" way to perform the census. Here is where the perspective of institutional logics becomes palpable in the case, because "The core assumption of the institutional logics approach is that the interests, identities, values, and assumptions of individuals and organizations are embedded within prevailing institutional logics" (Thornton & Ocasio, 2008, p. 103). Thus, it is not possible to understand the decisions and tensions of the 2012 census without the more significant dynamics that occurred in Chile at the time; they are deeply connected. The census approach somehow embodies the clash between the logic of efficiency based in a market-oriented way to run policies—professional paid pollsters, outsourced recruitment, and the whole efficiency frame—and the ideas of participation and policies towards social justice. The new census meant the abandonment of a long and highly valued tradition of citizenship. The following excerpt from a citizen’s blog, illustrates the nostalgia of the old census with volunteers, "people peeped out to see if the ´census girl´ was coming, children and dogs accompanied me through the dusty streets, happy all of them, they and I... happy to be part of the same thing, protagonists of the same country" (Bravo, 2012). Similarly, a former government authority stated:

I think the mistake was also to break with tradition. It was known that they [censuses] were so important for the people, and besides, everyone has memories when they were students and went to census. So, there is one powerful thing related to the republican tradition of the country [...] So, to break that tradition? I think that was a mistake.

This clash of logics also shows a popular longing for a better past, a time where the census belonged to all Chileans. The abrupt abandonment of this symbol shows what King
and Crewe (2013) called “cultural disconnection” of the policy, as the new census format failed to read the predominant desires and values and therefore came into conflict. For many interviewees, it was an illusion to believe that such deep-rooted practices could change from one day to the next. The following excerpt from an INE high official, illustrated the power of the de facto census experience:

Chileans, in general, are very much doing things the same way. It's as if the next mayoral elections were 100% electronic, No! because the people, especially the older people like to go to the ballot box. The people love to talk in the line, they see the same people in charge of the voting station, and they greet them because they already know each other. So, you can't make those changes overnight.

From this paradigmatic level, the understanding and explanations for failures rest in more significant ideological assumptions. Hindmoor and McConnell allude to the conflict of profound values and ideas that lead to paradigmatic pathologies, understanding them as: “[T]he grander models and principles that guide societies are at the heart of often bitter disputes about the ideals best able to provide societal success and avoid failure” (2015, p. 67). Thus, there are judgments and interpretations regarding the census that are impregnated with the tensioned paradigms.

The tension of logics34 is clear in the opposing approaches of the 2012 and subsequent 2017 census. While the former emphasized the country's economic savings and the efficiency

34 In line with the increase in social demands in the last decade, it is important to highlight the intense social upheaval and citizen movement that broke out in October 2019 in Chile, which has been called the “Estallido social” or “social outburst of 18/O.” The trigger was the rise in the cost of the Santiago subway, but as with the student movement in 2011, it then gave way to even deeper demands for structural changes to reduce inequalities. Therefore, and in line with the "clash of logics" observed in the census case, the current social and political crisis, also during Piñera administration, have similarities in terms of the underlying logics in conflict.
of the process, the latter rested on the recovery of democratic values and the census as a citizen's feat. A political analyst referred to this tension:

The focus on efficiency led Piñera's government to want to conduct a census that would not interfere with the country's economic activity [...] Piñera forgot that the census is also an opportunity to build community and strengthen civic values. Just as if the organizers thought the “Teleton” is only an event to raise money, forgetting that it is also an opportunity to remind us that we must be in solidarity with the less fortunate, the Government believed that the census was just a process to count people and did not remember that it was also an exercise to help us understand that we live in a community. Bachelet's government, on the other hand, understood well the participative sense implied by the realization of a national census in a single day with high participation of volunteers (Navia, 2017).

Thus, the governments of Piñera and Bachelet, and their 2012 and 2017 censuses, embody fundamental values and logics of action that were and still are under dispute in Chile. The societal lens places the 2012 census case in a broader context, understanding policy failure in light of tensions in existing paradigms.

This chapter analyzed the census case through this third lens of analysis, the societal lens, focusing on political, social, and institutional elements that influenced the census failure. Regarding the political context, the analysis observed how the idea of excellence of the Piñera government worked as a powerful metaphor for the census strategy change, which added to the short-term policymaking perspective, the intense electoral competition, and the significant political crisis the government was going through. In addition, this lens observed that the growing influence of social media and new State regulations generated enormous pressure over the census policy. Another finding is that the failed Chilean census is not an exception but part of a trend of census problems and severe weaknesses of the NSOs in Latin
America. Finally, this lens analyzes the role of the social movement leading to a profound clash of logics of which the new census was also a part, confronting market-oriented ideologies with participation and social justice ideas. The Diagram N.13 below presents the elements of context according to four dimensions: the political context, the new rules of the game, census and statistical institutionality, and the clash of logics.

**Diagram N.13. Analytical Keys form the Societal Lens**

**New Rules of the Game**
- The growing power of social media
- Transparency and procurement regulations

**Censuses and Statistical Institutionality**
- New census methodologies
- Latin American census failures
- National Statistical Offices and institutional Capacity
- Transformations in the demography field
- The role of CELADE

**Political Context**
- The Government of the Best and census
- Short-term policymaking and intense electoral competition
- Governing coalition and the political crisis

**Clash of Logics**
- The eruption of the Student Movement
- Market oriented policy vs. participation and social justice
- New census challenged deep-root values and practices
CHAPTER 9
POLICY FAILURE. A MULTI-LENS ANALYSIS

According to the *Lenses Framework* proposed in this dissertation, the previous chapters analyzed the 2012 census failure case from the policy, organizational, and societal lenses. Thus, from different analytical backgrounds, each one of those lenses separately investigates and reveals some stresses of the census case and by doing so, responds to the first research question of this study, which is, *how do various lenses/perspectives understand policy failure differently?*

The study attests that each lens of analysis reflects a unique understanding of the failure, its conditioning factors, characteristics, and interpretations of the actors within the lens perspective. However, each separate perspective is not enough to understand the elusive phenomenon of policy failure. In simple words, "without each other, each one is nothing." Thus, the previous chapters have gradually revealed that the lenses complement each other. What one lens ignores, the other unveils, what is critical to one of them, also resonates by others, or even, what one lens emphasizes, the others lenses nuance.

Therefore, to the three previous analyses, this chapter offers a fourth: a multiple lens analysis of the 2012 census case. The multi-lens analysis combines and articulates different lenses examining the interactions and relationships amongst those lenses. This analysis does not fuse the perspectives of single lenses, but rather complements them, thus addressing the
dissertation's second research question: How does a multi-lens approach contribute to a better understanding of policy failure?

To illustrate the relationships between lenses, this chapter focuses on critical events and topics, which, from the narrative provided in Chapter Five, are key to understanding how the case unfolded. From each selected theme, it performs a two-step exploration. First, it identifies relevant insights and findings provided by the previous lenses, and second, analyzes the relationships between lenses. Thus, by delving into the individual lenses findings, and the relationships between them, the analysis shows how a multi-layered observation contribute to a better comprehension of the census failure. Following the chronology of the case and the key issues that emerged from the analysis, below is the multi-lens analysis of the following themes: census strategy change, expectations, decision-making, carrying out the census, data processing, media polemic, and evaluations and inquiries.

9.1. Census Strategy Change

The policy lens study revealed several deficiencies regarding the decision to change the census method–from the de facto toward a de jure approach– the most significant was the delay on census preparations, the eruption of the student movement, and the overall weaknesses of the census project. The analysis showed several shortcomings of the census project. There was a high turnover of the census team heads, leading to conflicting visions and missing leadership regarding the 2012 census. Besides, the census team did not have the best professionals, the experience or skills necessary to undertake the census task. Also, the analysis exposed significant delays in the de facto census preparations. In that context, the student movement broke in 2011, jeopardizing the viability of having enough volunteers for
the enumeration. The risk of a dearth of census takers threatened the success of the de facto
census operation, as the vast majority of the volunteers were typically students, the
protagonists of the student demonstrations. All of this, led the INE authorities to alter the
census strategy just a few months before starting the enumeration.

However, the policy lens does not explain the change of census strategy entirely, and
this is where the analysis is enriched by looking at the findings from other lenses. The study
from the organizational lens identified INE flaws that enabled this sudden change of strategy,
such as the lack of collaboration and tensions within the organization, and particularly the
absence of a permanent census unit. The census was a minor project for the INE; it was not
part of the institution's structure, nor did it have the necessary resources or stability to
adequately plan the census. Some signs of this instability are the high turnover of heads of
census mentioned above, the scarcity of skilled professionals for the census, and the team
members' labor insecurity. Thus, the low importance of the census within the INE, combining
with the lack of census leadership and low capabilities, made fertile ground for the abrupt
modification of strategy without opposition.

The analysis from the societal lens brings other insights regarding the census strategy
change. A first antecedent is that other Latin American countries moved from de facto
toward the de jure approach in that decade. Therefore, although the student mobilization
eruption triggered the census strategy change, it was possible because it strongly resonated
with this trend in the region. Thus, even though previous INE authorities ruled out moving to
a de jure census by 2012—as it required considerable planning, testing of instruments, and
other significant preparations—moving toward a de jure census was not strange for the INE.
The societal perspective analysis also identified the strength of the government's ideas of
excellence with a focus on policy efficiency. From here, moving toward a de jure census, conducted by professional surveyors, with better quality data, and lower costs, aligned with the ideas of efficiency, spurred the decision to change the strategy. Finally, in line with the clash of logics reflection, the analysis recognized the importance of the de facto census for citizenship, embodying solidarity and nationhood values. However, INE authorities did not weigh the census significance for the Chileans, the values it represented, and the resistance to change.

The census strategy change allows for observation of the interactions between lenses. Diagram N.14, presented below, and the following in the chapter, synthesize each lens's findings regarding the theme, and some relationships with the other lenses' findings. These diagrams help envision the Lenses Framework exercise, graphically placing together the new understanding achieved by combining the lenses' different perspectives. The diagrams distinguish each lens with a different color—policy in green, organizational in blue, societal in red—to facilitate identification of the lenses. Each diagram displays the most significant relationships between lenses for each theme, as seen in the dotted lines connecting the themes. In addition, a list of the key features of the themes presented in this chapter is available in Appendix N.8

The Diagram exhibit some relationships between the lens findings. There is a link between the census project's marginal role within the INE organizational structure and the overall census weaknesses with the delay in census preparations. The student movement threat also gave credence to moving toward the de jure census, as other countries in the region had. Similarly, the census team's weaknesses explained the scarce opposition to the change of strategy and the values at stake. Finally, there are some reinforcing dynamics between lenses. Given the marginality of the census project within the INE organizational structure, the lag in preparations, and the census project's whole weaknesses, the ideas of efficiency gained strength for the census strategy change.

9.2. Expectations

The policy lens analysis showed that high expectations about the census generated enormous pressure on the policy, particularly during the implementation process. Thus, there was a contradiction between the enthusiastic public statements about the new census and the
lack of planning, scarcity of resources, and adequate skills to undertake the census task successfully. This tension in line of what literature calls “policy trap”–expectations of government are greater than their capacity to execute the policy (McConnell, 2020).

The organizational lens observed the INE’s complicated relation to the expectations. One of the INE’s main strengths was its high technical reputation, which led authorities to blindly trust the institution’s capacity to face the new challenge. Also, there was the pride, commitment and public service motivation of INE employees, who historically worked hard to achieve the INE’s goals, and who faced the challenge of the new census, without even being adequately prepared. Besides the above, there is also the role played by the INE Director in building the high expectations, who, without experience or expert advice, enthusiastically promoted the new census project. Thus, from the INE’s perspective, these three elements sought to compensate for the lack of planning to meet census and the INE expectations.

The societal lens also revealed the high expectations of the first right-wing government since the dictatorship. The analysis noted the power of the "government of the best" ideas over the census, in line with the government's maxims on the modern state, i.e. more efficient, less bureaucratic. These expectations–present on the government's agenda, policies, documents, and authorities statements–reveal the time’s guiding ideas. However, from the idea of the clash of logics proposed, there were tensions over those expectations, which reflect deeper social dynamics and conflicting views. So, just as expectations reveal a logic related to efficiency and professionalism, another logic misses participation and the community sense. The student demonstrations were the voice of these "other ideas," with
sharp criticism of the market system and demands for greater participation. Diagram N.15 below illustrates the most relevant findings regarding expectations.

**Diagram N.15. Expectations Across Three Lenses**

The three lenses reveal the strength of expectations in the census case. There were high expectations regarding the new modern census, regarding the INE's performance, and the Piñera government achievements. Each of these elements separately provides valuable insight for understanding the failure. Still, by integrating them, it is possible to observe how they leverage each other. The idea of "government of the best" is expressed in the "best census in history," which was possible only because of the confidence in INE’s professional capabilities. Also, the government's prevailing ideas of efficiency resonated in INE authorities, and in that way increasingly feeding the high expectations. Expectations are a clear manifestation of the dominant ideas and desires, but they also reflect logics in tension, an implicit clash of ideologies that gradually became stronger. Like this, the multi-lens analysis shows the reinforcement of high expectations between lenses.
9.3. Decision-making

The policy lens analysis evidenced the lack of census leadership and the overall weaknesses of the census project. Thus, the analysis observes that decisions were far from best practice. Some shortcomings that reflect the lack of technical foundations in decision-making were: lack of proper pilot tests to assess the census strategy change and its logistical and methodological implications, failing to follow international recommendations on survey protocols, absence of a timely post-census survey, lack of expert advice on data processing, and ignoring recommendations on estimating missing data, among others. Therefore, the analysis showed a lack of technical criteria or census experience with other censuses in which to base census decision-making.

From the organizational lens, the first analytical key is the role of the INE Director. According to INE's institutional configuration, the director's appointment is not based on merit but on the president's trust, which allowed the economist Labbé to head the INE, who had neither experience in public administration nor statistical expertise. The director's centrality, along with the inexperienced Labbé, manifested a scenario of distant leadership of low legitimacy within the INE. Another critical situation was: the establishment of a parallel decision-making structure to the formal chain of commands of the INE. Thus, despite their lack of expertise, Labbé’s advisors had a significant influence on decision-making—over the census, and other projects—bypassing formal authorities, all of which generated enormous distress and conflicts between groups. Thus, despite INE CEO efforts—who operated as a bridge between the director’s team and the rest of the INE—census decisions were permanently under significant stress. Another related element is the lag in modernization processes in the INE. As stated, the INE had rigidities in its internal work dynamics and
important lags. There was no documentation or registers regarding previous censuses’ experience because decision-making used to rely on public officials and their cumulative experience. This lack of formalization of practices gave room to a decision-making style that did not rely on technical knowledge.

The societal lens revealed significant institutional weaknesses of the National Statistical Offices (NSO) in Latin America that adversely impacted their policies' quality and effectiveness. Thus, Chile had difficulties, but the whole region was lagging on census matters. Some critical difficulties faced by NSOs were the lack of autonomy and inadequacy of their directors. In addition, the societal analysis shows the prevalence of the ideas of the "government of the best." With a focus on efficiency and market-oriented policies, decisions regarding the census endeavored technical quality, effectiveness, and lower cost. Diagram N.16, presented below, synthesizes the elements described regarding decision-making, and the interactions between lenses.

**Diagram N.16. Decision Making Across Three Lenses**

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One interesting finding from this analysis is the lack of formalization of the cumulative knowledge and usual practices gave room to a new decision-making style, this time distant from technical criteria. This decision-making method became even more prevalent because of the knowledge gap, the lack of experience in de jure censuses, and the overall weaknesses of the census project mentioned before. In addition, all three lenses showed elements that reinforced a particular style of decision-making, because there is a relationship between the NSO's flaws, the specific profile and central role of the INE Director, and the absence of technical criteria in census decisions. Another cross-cutting element points to the dominant ideas of efficiency—the government of the best—which led, to the establishment of a parallel decision-making structure aligned with these ideas. These ideas became sounder by the undisputed authority of the director, and the weaknesses of the census project, thus leading to decision-making that aimed at the census efficiency.

9.4. Carrying Out the Census

The detailed case description and the study from the policy lens exposed many problems during the census enumeration, showing little by little the weaknesses of the formulation process, lack of resources, minimal planning, and the poor capacity of the INE to correct the mistakes that occurred along the way. Some implementation problems were: the scarcity of census takers, inadequate training and misleading information, but the most problematic was failing to control and supervise the enumeration.

The organizational lens showed an INE under pressure during the implementation stage, which exacerbated conflicts between groups within the INE—the Director and his close advisors on the one side, and the rest of the INE on the other side. These tensions involved a
lack of technical collaboration to solve problems, poor communication, and an increasingly deteriorating working climate. The analysis also revealed a clear manifestation of groupthink dynamics. Director Labbé and his close advisors had an unrealistic view of what the new census endeavor entailed. Also, they gradually showed intense groupthink symptoms, which led to flawed decisions—such as reducing the budget a few days before starting fieldwork, not acting in time to correct the misclassification of houses, and ignoring the warnings of the reports of lagging, among others. Consequently, some symptoms observed at this stage were: the overestimation of the capacities to achieve a successful census, the blind confidence in the census project, non-acceptance of different visions, concealment of information, and pressure on the dissenters.

As stated, the societal lens also revealed that the Chilean census was not the only one with problems; on the contrary, many countries in the region faced implementation difficulties, and some specifically when moved toward a de jure census modality. Besides, the analysis showed that the census met complex and unexpected social transformations that affected its implementation; this included the power and high presence of social media and the challenge to run a census under the new regulations of the Chilean public administration. Finally, the societal analysis again manifested the power of "the government of the best" ideas in the implementation. Authorities’ statements stressed the many advantages of the new format, and the achievements made, such as the quality data collected and the high coverage achieved. Diagram N.17 below synthesizes some features arising from each lens and the most important interactions between them.
Diagam N.17. Carrying Out the Census  Across Three Lenses

There is a strong link between the census formulation flaws and the enormous pressure experienced by the INE during the implementation. Some of the causes were: the rushed selection of censistas, the problems during the training, the administrative burden of the payments, the adaptations of the logistics of enumeration, and the additional efforts to correct erroneous classification of households. All of them were complicated processes with no contingency plans. Thus, the analysis shows a vicious circle where the flaws in the formulation generated enormous pressure on the organization, which also affected the INE's ability to conduct the census competently. This pressure grew as implementation problems became more complex, hand in hand with increasing conflicts within the institution. The combined lens analysis exposes elements of context that heightened pressure on the INE and the census. The unexpected explosion of social media—monitoring and overseeing every detail of census implementation—and the additional constraints public administration regulations—strict public procurement, and accountability procedures. Besides, these implementation problems were not exclusive to the Chilean case, other censuses in the region
suffered. The multi-lens analysis also reveals the relationship between the ideas of “the government of the best” and INE organizational dynamics during the implementation stage, leading to conflicts between groups, and groupthink symptoms. The latter, the groupthink dynamics, had a clear impact on the control and supervision of the enumeration, especially in the secrecy of information on the enumeration progress, an issue that later aggravated the conflict within INE.

9.5. Census Data Processing

After a very complicated enumeration process that spanned four months, the INE faced the additional challenge of data processing. The policy lens analysis identified a lack of planning throughout the policy cycle, and data processing was no exception. Although there was plenty of literature, handbooks, and detailed international recommendations on how to address data processing and solve census data problems, there was no work plan with validated technical criteria. As described in the case, the manner the data was processed was a trigger for the "data manipulation" controversy. Thus, the lack of a data processing plan according to the new approach, and the absence of clear technical criteria, explains the lack of rigor in the treatment of data, including the handling of missing data and the imputation of dwellings.

Similarly, the organizational lens provides insights about data analysis. In combination with other tensions within the INE, the convoluted implementation of the census left in its wake a conflict-ridden organization at the time of data processing. In a climate of distrust, technical confrontations and heated discussions between groups were commonplace. Unlike past censuses, where the census team conducted the data processing with strong
support from the INE technical area, the 2012 census data processing was carried out by an INE Director’s small trusted group, all happening in a "behind closed doors" mode. This dynamic shows the growing symptoms of groupthink. Some dynamics observed in this stage were the blind belief of the group's inherent morality and the idea that those who did not support the group's decisions were enemies plotting against the census and the government. Thus, census data processing was carried out under a context of mistrust, secrecy, and a lack of accountability.

The analysis from the societal lens complements previous insights regarding data analysis. On the one hand, there were significant institutional weaknesses of the NSO in Latin America, which is consistent with the perception of decay of the demography in the region– CELADE no longer trained demographers, highly skilled professionals were scarce, and the perception of CELADE's diminished influence. On the other hand–despite this perception–the analysis revealed essential statistical and demographic collaboration where countries relied on CELADE experience and support. The NSO in the Latin American region turned to CELADE for expert assistance on different matters, such as planning, methodological transformations, data collection, errors and omissions and experiences from other countries. Notwithstanding the many mistakes made with their censuses, thanks to CELADE’s technical support, some countries corrected errors and managed to “save their censuses.” However, with the 2012 census in Chile, the Piñera government broke off relations with some UN bodies and dispensed with CELADE's advice throughout the census project. Therefore, at the time of data processing, the INE did not have any specialized support to address the data’s complex problems or the correct data imputation processes. Diagram N.18 summarizes the main features of census data processing.
The nonexistence of rigorous planning and the lack of any expert advice or specialized international guidance regarding data processing—especially given the new de jure mode, and the significant problems in data collection—increased the INE’s level of conflict. Another link between lenses points out the relationship between the lack of clear technical criteria for data processing and the perceived demographic decay, including the institutional weakness of the NSOs, and the scarcity of demographers. However, of the elements revealed by the lenses, undoubtedly, groupthink dynamics are critical for understanding data processing and the dire implication in the census’s failure. Some aspects that account for the existing groupthink were: the isolation of the group in charge of data processing, the lack of collaboration with specialized instances, the secrecy in handling the information, the blind confidence in the census success, the belief in the inherent morality of the group, and the overestimation of the group’s skills to process census data.
9.6. **The Media Polemic**

Another theme for this multi-lens analysis is the controversy over the census data which exploded because of the accusation of data manipulation made through the press by the CEO of INE, an episode known as the media polemic. The case disclosed the existence of various signals and warnings of the census problems. Some of them were: recommendations for postponing the census, analysis of critical issues, backlogged enumeration reports, suggestions for data presentation, as well as a specialized analysis warning of severe problems of consistency in the data collected. Despite these alerts, when authorities presented the census’ final results, the many errors in the data were exposed—demographic inconsistencies, lack of clarity on estimation methods, and various errata.

The organizational lens showed a very conflicted INE, with constantly heated discussions, groupthink dynamics, and a growing politicization. All this led, amid an internal INE crisis, to firing INE's high authority on technical matters. Then eleven INE high officials raised their voices—through a public letter—defending the institution's values, denouncing the deplorable management within the INE, and expressing their concern about the institution's loss of professional quality. Subsequently, the INE's CEO—who served as the director's right-hand—was accused of manipulating the census data. From an organizational point of view, both the inadequate processing of census data and public denunciation directly affected the heart of the INE, its professional reputation, and its workers' pride and commitment to the civil service. Thus, the organizational lens reveals a highly conflicted INE that was further weakened by the media controversy.

The analysis from the societal lens reveals necessary contextual and political conditions to understand the controversy. On the one hand, Chile has a policy-making style
focused on the short term, determined by governments' political pressure that only last four years without re-election, and are always eager to show policy results. On the other hand, the warning about census problems, as well as the later denunciations, happened in the middle of a major political crisis of the governing coalition. In addition, there was a major financial scandal that left the coalition without a presidential candidate just months before the election. This political crisis touched the INE, as the institution was without a minister in charge (when Longueira was nominated as the new presidential candidate). Finally, and related to ideas of the government of excellence, the societal lens revealed other cases of “manipulation” or data “misrepresentation,” in particular, the lowering of poverty figures episode. All this exposes the enormous weight that the presentation of data had for the government, understood as a sign of success and compliance with expectations. Diagram N.19 illustrates the critical elements described, and the most significant relationships between lenses.

**Diagram N.19. Census Media Polemic Across Three Lenses.**
The first element worth noting is the link between the warnings and the political crisis. The political crisis and the focus on the short term led government authorities to turn a deaf ear to the signals of poor quality of the census and problem alerts—attributed solely to internal conflicts and the growing politicization within the INE. A second prominent element is how the exposed census errors and the accusation of data manipulation profoundly threatened the INE's core values, an issue that triggered the public letter from INE's professionals. A third element is a relationship between the complaints, the open letter, and the data manipulation accusation. The letter arose after the firing of the technical Sub-directorate and pointed to serious concerns about the INE's direction and the risk to the INE’s professional quality; and the accusation made by the CEO regarding the dubious processing of the data. With different focuses, both complaints arose because the warnings didn't work; they are desperate calls for attention to political and organizational problems. Finally, there is a relationship between the accusation of data manipulation and the background of the government's dubious handling of figures. Thus, the precedent over poverty figures, the CASEN scandal raised suspicions about government behavior patterns to show good results within the context of the government's expectations of the best.

9.7. **Evaluations and Inquiries to the Census**

Consistent with policy failure literature, the 2012 census case exhibited a significant controversy and intense debate—both academic, political, and social—over the criteria and perspectives to assess the success or the failure of the census. The policy lens analysis showed several investigations and assessments, which were carried out by different actors, and through various methodologies. Of all the evaluations, undoubtedly, the most significant
was the commission of national experts, which identified severe census errors, concluding that the 2012 census was not suitable for public policies, and recommended carrying out a new census in an abbreviated version. After that assessment, there were several more, one carried out by international census consultants, the chamber of deputies, the comptroller, the public prosecutor's office, and finally, a statistical and demographic analysis of the census data, carried out by the INE.

The organizational lens presents a conflicted and depressed INE at the time of the inquiries. The growing internal conflicts, the lack of leadership, and the whole census scandal deeply affected the organization, generating distrust, and damaging its core values. Thus, the different investigations—meetings, hearings, report writing, public statements—produced even more pressure on the institution, all of which under intense and merciless press coverage, worsening conflicts in an increasingly deteriorated organizational climate and creating new polarizations. While some defended the census quality and sought ways to fix the data and "save the census," others argued that the whole census failure—including the commission investigation—was part of a major plot to damage Piñera's census in the run-up to the next election. Other people, convinced of the census’s poor quality, supported a new census to count with reliable data for policy decision-making.

Finally, the societal lens shows the political crisis of the governing coalition, not only because of the absence of a minister in charge but also because of the wear and tear of the government pressured by many social demonstrations. This political crisis influenced the convening of the commission of experts, the selection of their members, the President's apologies for the poor quality of the census, and the subsequent call for an additional
evaluation seeking a "second opinion." All this took place in a context of political turmoil, loss of direction, and with the presidential elections only a few months away.

**Diagram N.20. Evaluations and Inquiries Across Three Lenses**

There are relationships between lenses that contribute to a better understanding of the results and implications of the set of evaluations over census policy. First, the political crisis influenced the assessments, affecting the convening of the evaluation committees, without clarity on the criteria and expectations of such evaluations, and with little or no political management of the crisis. A second element is that the government's political crisis echoed a crisis in the INE, which faced the evaluation processes from a growing internal polarization. The multi-lens analysis shows that the two crises overlapped and enhanced each other, which is something not observed from the individual lenses separately. Finally, a third factor is the damage caused to the INE by the investigation process, but especially the drastic and unexpected results, which contributed to worsening relations within the INE and profoundly affected institutional values.

9.8. **Individual Lenses and Multi-lens**

Based on the analysis from the policy, organizational, and societal lenses, this chapter offered a fourth analysis of the 2012 census failure in Chile, but this time from a multi-lens perspective. This analysis provides a double insight. First, identifies the contributions and distinctions from each one of the lenses regarding a
specific theme; and then, explores the relationships between the lenses’ findings. These analyses reveal how a combined examination provides an enhanced comprehension of the failure case. Both steps are part of this multi-lens analysis; it is not possible to address one without the other.

As the saying goes: "Nothing is true, nothing is a lie; all depends on the glass you look through,” reflecting the classic epistemological tension about perceiving and knowing social reality, which is at the very heart of the policy failure literature. This dissertation recognizes the enormous complexity of social reality and the different ways of beholding it. Accordingly, the Lenses Framework of this study does not intend to simplify the complexity of the failure phenomenon nor to propose an integrated or unique framework, but to offer a different way of observing and analyzing policy failure.

It may be useful to return to the analogy proposed in Chapter Three about the house and the photograph. Photographs reflect the lenses or the different ways of observing and capturing social reality. Each photograph has a frame, an intention, and can capture some characteristics of the house. Thus, each photograph tells a story, and just as it reveals certain things about the house–color, shape, materials–it also ignores others. When there is more than one photograph of the same house, there are more lenses involved, different ways of observing; so, added to what each photo provides, there is a richer understanding of the house because of these different viewpoints. Thus, the Lenses Framework proposed in this dissertation is, similar to the above analogy, an instrument to achieve a richer understanding. Each lens is like photography, revealing a set of characteristics and tensions of the case. Then the multi-lens analysis allows combining those different perspectives for enhanced comprehension of this very convoluted subject of policy failure.

In line with the Lenses Framework’s fundamental idea, the understanding of the failure of the 2012 census differs according to the criteria and perspectives, varies depending on the observation lens. Analysis from the policy lens offers an easy understanding of why the policy failed–such as the rushed methodology change, lack of funding, poor planning, and lack of supervision. Therefore, if only this "photograph" existed, there would be only one narrative with a series of convincing explanations for the census’s failure. Likewise, the organizational lens analysis offers an additional “photograph,” that, independently of the previous one,

35 In Spanish, the rhyme is: “Nada es verdad, nada es mentira; todo depende del cristal con que se mira.”
provides other explanatory clues to the flawed census—such as marginality of the census project, groupthink dynamics, and the delay in process modernization. In the same way, the societal lens provides insights into the country’s social and political context—such as short term policy-making, political crisis, underlying clash of logics—that affected the failure. Thus, each lens analysis, each narrative helped to better grasp the failure of the census.

However, it is important to emphasize that the multi-lens approach is much more than just an addition, it is a new perspective. First, because it brings together individual perspectives, recognizing the findings and valuing the contribution that each one provides. And second, because when the contributions of each lens are analyzed together, new findings emerge. Just as there are elements that only emerge from individual analyses, so too there are factors and new understanding that only arise in this integrated analysis. Consequently, and following Aristotle’s words: “the whole is greater than the sum of its parts.” Therefore, a multi-lens analysis, that recognizes individual perspectives and their relationships, provides an even enhanced understanding of the census failure.
CHAPTER 10
CONCLUSIONS

One of the hallmarks of policy failures is that they are controversial. There is rarely agreement among political or social actors, or even among researchers, regarding what failure means, implies, or what factors are associated with it. From this convoluted nature, this dissertation explored the following research question: How do we understand policy failure? To answer the question, the study offered the Lenses Framework as a novel way to address policy failures and applied this perspective to the failure of the 2012 census in Chile.

The chapters of this dissertation reveal a challenging path to understanding policy failure. Along with an all-encompassing literature review of policy failures in Chapter Two, and the proposed analytical device of the Lenses Framework in Chapter Three, Chapter Four described the method of the study. Then, and following the case study approach, Chapter Five presented a detailed narrative of case of the 2012 census failure. Following that, Chapters Six, Seven, and Eight analyzed the case from the policy, organizational, and societal lenses, revealing how each lens offered different insights into the case. Finally, in Chapter Nine, the multi-lens analysis provided a more comprehensive perspective of the failure episode.

Concluding, this chapter discusses some critical topics arising from the dissertation and highlights the contributions of this study. First, it reviews the common characteristics of
policy failures in the case. It then discusses the relationship between policy failure and learning, examining the type of learnings—or the lack of learning—in the census case. Subsequently, it presents the academic contributions of the dissertation. Next, it provides policy contributions and recommendations. And finally, it proposes future areas and topics for research.

10.1. Common Characteristics of policy failure in the case

The 2012 census case illustrates most of the common characteristics of policy failure observed by literature: perception of damage, avoidability of failure, high visibility, the government as responsible, blame allocation–avoidance dynamics, and variation in the judgment of failure over time. This section presents a detailed analysis of these characteristics in the case.

Perhaps the essential characteristic is the idea of harm or perception of damage caused by failure. The literature distinguishes between damage, intensity, extent, severity, or duration, all pointing to the effects of the damage that extends beyond the scope of the policy (Linder & Peters, 1987; Bovens & ’t Hart, 1996; Howlett, 2012). Consistent with the literature, all actors, regardless of their roles and political positions, perceived that the census event produced some type of damage. An example of the damage is the country's enormous economic cost: at least 30 billion pesos for the 2012 census36, equivalent to more than $US50 million (all figures as of December 2018). Other types of damage are the amount of energy,

36 This figure considers the resources allocated to the census project in INE budgets from 2008 to 2014 (INE, 2020).
time, and other resources devoted to containing the controversy, examining the failure, and searching for solutions, which played out over several years. Another harmful effect was that the lack of reliable data severely affected the focus and quality of the country's policies and the allocation of resources to the territories. Hence, the census failure generated adverse consequences far beyond not achieving census goals. The policy lens revealed broad damage to the policy, resulting in the effective invalidation of the 2012 census with a commitment to run a new census in 2017. The organizational lens observed severe harm to the INE's professional reputation and deterioration of the organizational climate. Finally, the societal lens noted how the controversy and the endless process of inquiries affected government stability, generated a loss of social trust, and high degrees of politicization.

The notion of policy failure is not limited to the damage it has caused. Another characteristic is whether policy failure was intentional or not. When public opinion and policymakers perceive the event as deliberate, the judgment of failure is strong and consequences long-lasting as opposed to a perception that the event was not intended (Howlett, 2012; Stone, 2002). This dissertation’s analysis indicates that there was no intentionality for the census to fail. As revealed by the different analytical lenses, it occurred a result of many factors, such as policy decisions, organizational dynamics, and the country’s social and political context.

Another key feature is the avoidability of the failure event. The failure’s judgment is stronger if the actors believe that the event could have been foreseen, avoided, or better controlled (Bovens & ’t Hart, 1996; Gray, 1996). Avoidability is a prominent theme in the case. Different actors at different moments considered the census failure, whether by action or omission, to be preventable and avoidable. There were plenty of questions such as: What
would have happened if...? What could have done differently? Or statements such as: "with expert help, we could have saved the census;" "If census expectations hadn't been that high, census errors wouldn't have been so bad;" "in a less troubled INE, they could have prevented the crisis from escalating."

The case presents many voices expressing the avoidability of the failure. From the policy perspective, the notion of avoidability was in: the decision to change the census strategy, not to postpone the census date, the late post-enumeration survey, the lack of expert support for data processing, and the distorted presentation of the census results. Similarly, from the organizational lens, the judgment on whether the failure was avoidable was observable in: the absence of opposition to the abrupt change of strategy, the lack of proper follow-ups and timely correction of enumeration problems, the deficit of coordination, and especially in the insufficient warnings about problems. From the societal lens, avoidability appears linked with the President's statement of the best census in history, and the inadequate crisis management, particularly regarding the media and census evaluations.

The visibility or “publicness” of the event is another typical characteristic of policy failures (Bovens & 't Hart, 1996; Howlett et al., 2015). The 2012 census failure had high visibility, extensive media coverage, and significant social media attention. Some factors explaining this salience were: First, the eruption of the controversy—the data manipulation accusation—quickly captured public attention. Second, the dispute lasted for a long time, as it was rekindled many times by different events—the accusation, the investigations process, the new census. Third, in line with census's public nature, all actors have a point of view and something to say about the census. Fourth, the census failure represented damage to a country's core values (Brändström & Kuipers, 2003). The last factor associated with the
event’s public nature was the political moment, since the controversy appeared a few months before presidential elections.

The search for liability, responsibility, and blame is another characteristic of policy failure. As the literature suggests, in the census case, the allocation of the responsibility falls on the government, public officials, and policymakers (Bovens & ’t Hart, 1996; Howlett et al., 2015). In terms of individuals, charges fell on the INE Director Labbé—for implementing the strategy change, taking bad advice, denying difficulties; President Piñera—for appointing Labbé; and the INE Director Coeymans—for crisis mismanagement. The liability also relied on groups, mainly on the director's advisors—for technical amateurishness, inability to listen, overconfidence, and stubbornness; INE's high officials—for not upholding professional standards, dereliction of duty, and failure to warn in time; as well as the opposition coalition—for managing the crisis for electoral purposes and not trying hard enough to rescue the census data.

Inherent in policy failure episodes are the dynamics of blame avoidance and blame allocation, the so-called blame games (Hood, 2002; Howlett, 2012). The census case displays some blame avoidance strategies. One of them was “the risk defensive strategy” (Hood, 2002), which involved statements by representatives, and government authorities, stressing positive elements of the 2012 census, such as lower costs, better training, and better data quality. Similarly, the appointment of evaluation commissions exposes the common strategy of delaying the blame. Another strategy was the narrative to limit the liability, for example, the impression of the political plot, or the technical justifications of the data processing model (Brändström & Kuipers, 2003). Regarding blame allocation, the most common strategy is scapegoating (Hood, 2002, 2007), which fell mostly on the INE Director Labbé.
Besides, in the context of the 2013 presidential campaign, the contending coalition emphasized the damage caused, and by announcing the new de facto census, it reinforced the allocation of blame to the Piñera government (Hansson, 2018). The analysis observed a connection between the assignment of blame, and the dynamics of groupthink (‘t Hart, 1990). The INE Director (with his close advisors and the head of the census) presented several groupthink symptoms, including overconfidence, isolation, and blindness to failure. Hence, a large part of the liability ends up falling on them.

The last characteristic is that the judgment of a policy's failure changes over time (Marsh & McConnell, 2010; Newman & Head, 2015). Based on the research process and the analysis performed, there are some interesting distinctions about time. First, the severity of the judgment of the census failure increased over time. Statements and testimonies closest in time to the census and the scandal are less harsh in their judgment than ones developed later. Second, the 2017 census revitalized the 2012 controversy among political actors, the media, and the academic community, and the favorable perceptions regarding the 2017 census worsened the judgment of the preceding failure. Third, aligned with the idea of a clash of logics, the profound social and political crisis that exploded in October 2019, challenged efficiency-oriented policies and exposed a worn-out and failed government—the second presidency of Piñera—exacerbating the perception of the failure of the iconic 2012 census.

10.2. Learning from Failure

There is a close relationship between policy failure and policy learning. The analysis of a policy failure implicitly includes reflection so as to avoid repeating mistakes or to help correct the course. However, learning from failure is not simple. As reviewed in Chapter
Two, there are political, organizational, and institutional barriers to learn from failures (McConnell, 2010b; Newman & Head, 2015). While this dissertation’s focus was not on policy learning, the case analysis provides interesting insights. This section discusses the window of time between censuses, the narratives of failure that prevent learning, learning according to lenses—policy, organizational, and societal—as well as the question regarding the right kind of learning.

**Window of Time to Learn**

The issue of learning is rather compelling in this case. A census involves a multiplicity of complex logistical, methodological, and operational efforts in a rapidly changing social context, so the possibilities for mistakes—and learning—are numerous. Unlike other policies, censuses take place only once every ten years, with a long window of time—to learn and plan—between one census and the next. Thus, there are two critical windows of learning, the one coming from the 2002 census experience, and the second, which gathers the 2012 census errors for the 2017 version.

Preparations for the 2012 census took the lessons learned from the 2002 version and UN recommendations. On this, the societal lens revealed the importance of collaboration, mainly through CELADE—regional workshops, handbooks, and technical support—which is very much in line with the concept of lesson-drawing (Rose, 1991). However, the abrupt change of strategy, along with other factors—lack of resources, absence of expert support, census unit weaknesses—ended up disregarding lessons learned from the 2002 census—such as recruitment, training of volunteers, or logistics on the census day. Besides, this dissertation offers a unique feature to observe learning, the implementation of the 2017 census, which
involved an unusual and shorter window of time, and a different learning challenge due to the “failure” of the last one.

**Narratives for Learning**

Unfortunately, policy failure is no guarantee of learning; several barriers and resistances prevent it. One of the most common obstacles to learn from failures is the multiplicity of interpretations about its causes, characteristics, and consequences. Walsh (2006) argues that learning from failure requires two conditions, a clear explanation of the failure, and a viable alternative for improvement. However, in the confusion of blame games and the various inquiries on census problems, the analysis performed did not find a single explanation or narrative of what the census failure was about, and along those lines, the avenues of the resolution were also confusing.

Some of the narratives in the case were: i) The narrative of “the government's obsession to achieve census goals at any cost,” explaining the disguising of the data to attest census success. There was no learning or clear solution from this narrative, but rather addressed the problem by exposing the crisis. ii) In reaction to the previous narrative, “it is not a failure, but complicated data processing,” which emphasized the technical complexity of the data processes performed. The solution route was the elucidation of the questioned criteria through expert inquiries. iii) Another narrative was the “the census is not a failure, this is a political boycott,” denying problems and attributing the polemic to a political strategy to damage the government. Besides exposing the boycott and diminishing the issues, the solutions proposed from this narrative were strengthening the organization's autonomy to de-politicize the institution. iv) An additional narrative was “there is no perfect census,” which, while acknowledging several problems, focused on fixing the census. This narrative
framed the problem as a complicated and challenging data problem to be solved by highly qualified demographers and statisticians. v) The prevailing narrative was "the census can't be fixed, let’s do it again," which underlined the severity of the errors, the impossibility of saving the data, and the urgency for reliable data, proposing a clear solution: a new census in 2017. Hence, to learn in the context of contested narratives is difficult and even improbable. Even though the latter narrative prevailed, it does not mean it was the best, the right one, or the one that facilitates learning. It reflects the power struggles and searches for explanations in a context of government changes and urgency to close the controversy.

**Types of Policy Learning**

The *Lenses Framework* acknowledges the multidimensional nature of policy failures. Similarly, policy learning has many facets and therefore requires different ways of observing. Based on the model of *Types of Policy Learning* proposed by Bennet and Howlett (1992), the census case presents differences on learning according to the type of learning, the purpose of learning and domain—the program (policy), the organization and the broader social paradigm (societal)—(see Diagram N.8 in Chapter Two).

Of the three domains, the policy showed the most straightforward learning in the census case. In line with the concept of *lesson drawing*, census errors allowed for improvement of the *instruments* and the entire *program change* for the 2017 census, and thus presented *instrumental learning*. Some upgrades were: a supervision system, better articulation within the INE, collaboration with other actors, better communication strategy, improved training for census takers, and transparency. For the model of Bennet and Howlett, *policy networks* are the learners, however, the case didn’t provide enough evidence of widespread learning beyond INE professionals and CELADE.
A second domain is government learning, where the actors who learn were the INE public officials. The case showed a worn-out institution, with a complex structure, inertia, a leadership crisis, and difficulties in improving its processes. Although there were improvements at the organizational level—such as collaboration with CELADE, technical meetings, and a greater focus on transparency—most of the learning was circumscribed to the policy dimension. The INE energies were on implementing a successful census, de-prioritizing other INE process-related improvements. Consequently, the failure of the 2012 census did not trigger an organizational change. Nevertheless, organizational learning is generally slow, history-dependent, and requires time for the experience of failure to be expressed in new practices (Levitt & March, 1988; Desai et al., 2017). In 2019, the INE began a process of organizational improvement, and these transformations could correct organizational difficulties linked to the 2012 census failure, a topic for further study.

The third domain aims at social learning, where the learners are the communities. The societal lens shows how the 2017 census represented social values recoveries such as democracy and participation. However, the case shows contradictory evidence of learning at the societal level. On the one hand, it points to a paradigm-shift of policymaking that confronts dominant ideas of efficiency-oriented policies. Nevertheless, on the other hand, the 2017 census returned to the known traditional de facto strategy, thus rejecting innovation. Therefore, lessons learned at the societal level did not reach social policy learning, as it would require changing the actor's beliefs (May, 1992). Amid the clash of logics, between market-oriented versus participatory policies, the 2017 census represents a way of making policies within that dichotomy, but not learning how to overcome this tension.
Negative Lessons?

The literature warns that learning does not always address the problems that caused the failure and that even learning may not be positive in the long run (Dunlop, 2017b; O’Donovan, 2017). The case of the failed census evinced instrumental learning at the programmatic level. Still, there are conflicting views on whether the learning was in the right direction, particularly about returning to the de facto method in the 2017 census.

With some exceptions, census literature and expert opinion point to the risks of implementing a one-day census by means of volunteers. From this perspective, the de facto census in 2017 was "a step backward." By wiping the slate clean, it does not adequately capture the lessons from the 2012 census mistakes, and coming back to the traditional census pointed to dysfunctional learning or a "negative lesson" (Dunlop, 2017a). As a counterpoint, from a different perspective, given the context, the INE authorities justified the return to the old method because of the urgency of having reliable data, and its abbreviated nature (shorter, less risky). However, the high valuation of the 2017 experience defied most experts' warnings, generating doubts and somehow tilting the balance for a de facto census. As noted, whether the lessons were positive or negative depends on the perspective of those observing. For demographers and some specialists, this was a negative lesson, but the return to the de facto census was positive for citizens and other political actors.

10.3. Academic Contributions

The study of the failure of the 2012 census provides significant scholarly contributions. Some of them were already explored in this chapter—the common characteristics of failures and the connection between policy failure and learning. This
section focuses on the following contributions: the *Lenses Framework* as a powerful perspective, the value of the multidisciplinary approach, the role of the context in the analytical framework, the importance of the Latin American perspective, and this dissertation’s teaching potential.

**The Lenses Perspective**

Policy failures bring out the inherent epistemological tensions across the spectrum between positivist and interpretative perspectives; in simple words, whether the failure is observable and measurable, or if the failure results from perceptions and social construction. Beyond this irreconcilable tension, this dissertation assumes that policy failures exist, they generate severe damage, are convoluted, multidimensional, and socially constructed. Unlike other approaches that attempt to address the complexity of the phenomenon by structuring and simplifying it, this study assumes this epistemological and methodological conundrum as part of the unembraceable nature of policy failures. Thus, instead of struggling against or reducing the complexity, it makes it their ally and the starting point of observation. Therefore, based on previous findings and tensions of the literature, this dissertation proposes a new way of observing policy failures: *the Lenses Framework*.

The *Lenses* is a powerful metaphor. In a very simple way, the idea of lenses provides critical distinctions for this dissertation. Lenses encompass assumptions that shape observation, determining what to observe, and with what intention. Also, they have frames that reveal some elements and ignore others, and they contain the concept of perspective, emphasizing that the observer's position is also critical for the observation.

Accordingly, the use of the *Lenses Framework* with the 2012 census case allowed different insights. The policy lens highlighted the abrupt change of strategy, the
implementation problems, and evaluation tensions. The organizational perspective revealed difficulties in INE's structure, leadership, internal tensions, and other escalating struggles within the organization that shaped the census. And the societal lens revealed the institutional framework, political tensions and context influencing the development of census policy. However, the contributions of individual lenses separately are not enough to understand the complexity of policy failures. Each of the lenses shows a "photograph," an insightful and valuable perspective, but that is not the only one. The lenses need each other, they complement each other, and from here emerges the multi-lens analysis.

Consequently, the multi-lens analysis identified the relationships between the previous lenses findings, and showing new distinctions. Thus, without building a unified theory, the multi-lens approach, that is, the more integral analysis of the contributions of the individual lenses, delivers a more comprehensive picture about the census case, and without a doubt, the understanding that emerges from the lenses as a whole is better than from each one separately.

**Multidisciplinary and Transdisciplinary Approach**

This dissertation relies on different disciplines and research traditions. It gathers concepts and distinctions from public policy, public administration, political science, economy, and sociology among others. Each discipline contributes from its concepts, distinctions and points of view for understanding policy failure. Thus, this study starts from a multidisciplinary approach i.e. it draws on the particular contribution of the different disciplines and areas of study. But at the same time, this dissertation is also transdisciplinary, i.e. it comprises several disciplines and research fields in a transversal way, seeking to generate an integrated knowledge from each disciplines' contributions. Accordingly, the
*Lenses Framework* encompasses the idea that in order to understand a multi-layered phenomenon, as policy failure, it requires a multidisciplinary and transdisciplinary approach.

The *Lenses Framework* opens up new possibilities for exploring policy failure by using other lenses of analysis. Depending on their topics of interest, Scholars from different disciplines may incorporate new perspectives into their study of policy failures, such as inequality, gender, power, governance, participation, or climate change, among many other "lenses."

Hence, this dissertation's contribution is not confined to the 2012 census case in Chile, and the power of the *Lenses* is not limited to the use of the policy, organizational and societal lenses. The *Lenses Framework's* strength lies in the ability to look at the same phenomenon from different angles. This receptiveness to the diversity of approaches reinforces the multidisciplinary and transdisciplinary nature of the *Lenses* analytical device.

**The Role of Context**

Despite significant advances in research on policy failures, there are still shortcomings that lead to a limited and even causal understanding of the phenomenon. One of these weaknesses is the lack of attention to the context. However, policy failures do not occur in a vacuum but embedded in a cultural, political, social, and ideological context. The setting of the failure event is never neutral, but influences, and sometimes decisively, the interpretation, the path, the political reactions, the management, as well as the consequences of the failure. This research overcomes these shortcomings by encompassing contextual factors as a constitutive perspective of the *Lenses Framework*. Thus, the model draws attention to—and even intentionally forces it—the relevant aspects of the context where the failure occurred.
In this dissertation, the societal lens enriched the census failure analysis, stressing elements not observed or inadequately weighted by the policy or the organizational perspectives. Thus, analyzing failure episodes in context indubitably provides a better understanding of failure.

**Latin American Perspective**

This study reports a significant advance in the literature, both through abundant case studies and analytical models, to cope with the policy failure complexity. However, these contributions come mostly from developed countries, especially Europe, the United States, Canada, and Australia. With few exceptions (Figueroa, 2014; Olavarría-Gambi, 2018), research is scarce on Latin America’s policy failures. Thus, this dissertation contributes to the flourishing stream of research on policy failures, from the Latin American context, particularly, the Chilean setting.

**Teaching Potential**

The case of the 2012 census has great teaching potential. The first element of this teaching potential relies on the *Lenses* analytical device. The exercise of analyzing through lenses offers a structure that facilitates epistemological distinctions, and fosters reflection on the ways of knowing and investigating social reality. Thus, observing the same phenomenon from different lenses is a challenging academic exercise that defies previous convictions and encourages discussion.

A second feature of the teaching potential relates to the research approach. The case of the 2012 census failure is an excellent example of the case study approach and its flexible and multifaceted nature. Some case study’s significant characteristics in this dissertation are: the many and diverse sources of information, the different triangulation strategies, the
relationship with the theory, and the detailed and engaging narrative. Besides, this is an uncommon type of case study; it is about a case that contains other cases, in line with the concept of embedded units of analysis proposed by Yin (Yin, 2009).

The last element of teaching potential refers to the dissertation’s central topic, the failure of public policies, and how the analysis of failure triggers reflection on learning. The case study of the 2012 census exposes the circumstances of the failure, the decisions made, the interpretations about the events, and the actor’s reactions, among other relevant evidence. Thus, through a rich narrative, the case enables the readers to ask questions, to form their interpretations, and especially to transfer information from the case to other settings. Thus, the narrative promotes a reflection that goes beyond the case, allowing policymakers—and future policymakers—to reflect on their practices, perspectives of analysis, and reactions when facing mistakes or failures.

10.4. Policy Contributions

This dissertation is concerned with how policymakers and researchers address the convoluted nature of policy failures: with what lenses, biases, and types of understanding. Accordingly, in tandem with academic contributions, this study holds policy implications, some of which are closely connected to the academic ones. This section reviews the dissertation's policy contribution, the understanding toward learning, the use of the Lenses Framework to untangle policy failures, and the challenge of the pragmatic approach. Besides, it offers recommendations for the census policy, and the National Institute of Statistics.
Understanding for Learning

As the 2012 census failure case disclosed, policy failures are immersed in disputes between narratives and multiple perspectives. When it comes to political failures, the complexity and confusion are such that there is a tendency to seek explanations quickly in order to get out of the crisis. The problem is that the dominant explanations block other points of view, leading to an incomplete conception of failure, and reducing the probability of learning from mistakes. Therefore, the first step to learn from failures is to be aware of policy failure's convoluted nature and recognize the multiple explanations or narratives in dispute. A better comprehension can unblock ignored dimensions, providing the opportunity to propose mechanisms to learn from past mistakes, prevent failures, or handle them better once they have occurred.

Failure is no guarantee of learning. Dominant explanations of the policy failure can be dangerous; some of these interpretations could lead to repeat mistakes, waste resources, the wrong lessons, or even lead to a major government crisis. This dissertation shows that policy failures are elusive, complicated, and messy, and unfortunately, there is no "recipe" for learning from them. However, there are plenty of learning opportunities. Another step to advance in this direction is to promote culture, strangely enough, that "embraces" mistakes within the government agencies. Moreover, it is necessary to value this analytical exercise of error and trust our policymakers and public officials' capacities. By exposing the risks of not learning and the benefits of multi-lens analysis of policy failures, learning possibilities could be less one-dimensional and, therefore, better.
Lenses to Untangle Policy Failures

Policy failures shake up policymaking. The events of failure are controversial, and policymakers react to them from their perspectives, with the tools at hand and under existing circumstances; therefore, when facing policy failures, policymakers simply do what they can. Later, after the failure, the policymaking dynamics—time constraints, political pressure—prevent or even inhibit a more thorough analysis of past mistakes. Even though linear and causal explanations of the failure are usually helpful for decision-making, and given their simplicity are also tempting, they do not provide sufficient knowledge to grasp the policy failure’s slippery nature. That causal understanding can lead to wrong decisions and even aggravating the damage. As the saying goes, "brushing things under the rug makes a mountain." Therefore, unlike other public policy situations, where political guidance to action, quick and decisive decision-making, has several advantages, this is not the case with policy failures.

Thus, this investigation teaches that to better deal with failure episodes and learn from them; policymakers require to "untangle" the "tangled" nature of policy failure. Here is where the simplicity of the lenses metaphor provides useful insights for policymakers. First, failure events involve multiple interpretations and perspectives regarding the causes and implications of the failure, and there is rarely a unique or linear explanation. In other words, there are "many threads in that tangle." Second, policy failures are not limited to policy scope but involve different realms: the policy, the organization, and the broader societal context. While each of these lenses provides an understanding of failure from its perspective, it is a partial view because it observes some components but ignores others. By considering the three lenses together, the understanding of the failure, its expressions, breadth, and effects, is
better. Third, to truly understand policy failures is by accepting its multifarious nature, recognizing different perspectives involved. While these are only the first steps in dealing with policy failures, they provide a different scenario for dealing with controversy and eventually learning. As decision makers come to terms with the complexity of the failure events, they can distance themselves from the controversy and make better decisions.

**Pragmatic Approach**

This research is rooted in a pragmatic approach to policymaking, i.e. it bases its contribution to its practical consequences. The challenge of the pragmatic approach is twofold. It challenges academic research to be useful, to build bridges with decision makers, putting research findings at the service of decision-making. Additionally, it challenges decision makers to rely on scientific or academic evidence, which requires the development of analytical skills. Responding to these challenges, this dissertation moved away from strictly scholarly models, it did not seek to build a unified theory, but to explore simple and useful ways to better understand policy failures through the use of the Lenses. Moreover, the study provided useful insights and recommendations presented (see below).

**Recommendations for the Census Policy**

*To advance to a long-term census unit.* The census cannot be a minor project, as it has a strategic role for public policies, the country’s administration, resource allocation, and is the source for other statistical instruments. Besides, the census challenge requires assessment, learning, and planning between a census and the next. In order to succeed with the census, this requires a formalized and funded permanent census unit.

*To strengthen census capacities.* The idea of censusing, counting and characterizing the population, has become increasingly complex in the world–new formats, implementation
difficulties, new social problems. To meet these challenges, it is necessary to strengthen the capacities of those working on the census. Along with cutting-edge permanent training, it is essential to develop an ambitious program to attract and retain highly trained, flexible, and experienced professionals.

*To consider the different layers of the census policy.* The census involves highly technical and logistical knowledge. Still, its success depends not only on the correct exercise of that program, but also on the political, social, and even symbolic elements. Thus, it is necessary to promote an interdisciplinary approach in the whole census policy cycle. Whether through advisors or within the census team, it is critical to incorporate complementary perspectives to address the multifaceted census task better.

*To manage expectations for the 2022 census.* The census is a logistical and statistical exercise, but it is also much more than that. Due to the next census will be again under the de jure methodology, it is critical for the INE to properly manage expectations, because it could be a determining factor in the undertaking's success. There are still tensions at play that may affect the policy: the deep-rooted framing of failure of this census modality, the high citizen valuation of the de facto census, the criteria whereby the census considers good or bad. Properly managing these dimensions can make the difference between a successful and unsuccessful census.

*To innovate on census policy.* To innovate on census policy. The census is an expensive and increasingly complex operation, many countries have explored alternative sources and methods in order to have quality data. The failure of the 2012 census was a significant blow to innovation. However, census challenges go beyond the decision about de facto or de jure methodology. It is critical to advance in the coordination and use of the good
administrative records that Chile has, and also to explore alternative methods and testing of instruments, formats, and other complementary surveys, including logistical, methodological challenges.

To promote and safeguard census collaboration. The census is a very particular policy, and although it may seem contradictory–given the time between censuses–there is no time for trial and error as it is a once-in-a-decade policy playing a critical role for the countries. Whether through the UN or direct cooperation between countries, it is necessary to share knowledge, methodologies, and ways of addressing problems. And thus, it is essential to enhance this collaboration through formal mechanisms, resources, and incentives in the right direction.

Recommendations for the National Institute of Statistics

To advance to independence and autonomy of the INE. The changes in the regulation of the public senior management system introduced in 2018 contribute to the merit-based selection of the INE Director, but this is not enough, as it still does not guarantee his or her permanence in the institution or political independence. About INE autonomy, whether through an independent budget, powers by law or a new autonomous structure (similar to the Central Bank), it is critical to advance toward a funded institutional arrangement to safeguard the autonomy of the INE from the executive branch. These arrangements are not just formal or administrative steps, but political and symbolic, they aim to reinforce the idea of a technically robust and politically autonomous institution.

To progress in the INE's modernization program. Consistent with the institution's present and particularly future needs, it is imperative to develop recruitment, training, and retirement plan for INE employees. Also, to advance in the formalization of practices,
reviewing processes, and decision-making practices. These elements are vital for the INE to be, in practice and not only on paper, articulating the National Statistical System.

To promote and strengthen INE's technical instances. To promote technical instances of decision-making, analysis and outreach within the INE, with other government and also with academic institutions. Particularly in this matter, to effectively support the role of the INE’s Advisory Council–composed of five specialists–with oversight and advisory role.

To integrate multiple perspectives. Along with strengthening the technical dimension, this is essential to promote permanent instances of collaboration and participation that provide different insights. This means going beyond the input of statistical experts, economists, or policymakers, but integrating perspectives from social organizations, businesses, and citizens, for more relevant and legitimate policies.

To take care of the INE. INE values, history, and commitment of their employees constitute their identity, which was significantly damaged by the census failure, as well by other following controversies. It is crucial to recover the public service motivation so characteristic of INE. It is also necessary to gather and assess institutional culture and history, work on improving institutional self-esteem, and always foster a healthy organizational climate.

10.5. Study limitations

The study of the failure of the 2012 census in Chile provided interesting academic and policy contributions. However, this research is also subject to limitations, presented below.

There are some methodological limitations. Some key actors were not interviewed. Despite several efforts, whether for political or personal reasons, some key actors in the case
rejected the interview, including the former INE Director Francisco Labbé. Additionally, given time constraints and limited resources, most of the policymakers and stakeholders interviewed are from Santiago. With some exceptions, this dissertation does not sufficiently capture the perspective of regional or local actors.

There are some limitations regarding the case study approach and the qualitative nature of the dissertation, that, even though these are inherent of the research design, worth mentioning. First, the results of this study are not generalizable in statistical terms, nor to draw causal lessons. The census case provides an opportunity to transfer learning to other settings in line with the ideas of analytical generalization and transferability of findings. Second, as it is a qualitative study on a complex topic, it is not replicable either. The interviewees' statements and perceptions respond to a given context and time when the research was carried out, i.e. if this study were to be conducted again, at a different point in time, for example in 2022, it would provide other insights.

Another limitation points to the time frame of the study. Aligned with the statement “Failure has fluid boundaries” (Wajzer et al., 2016, p. 35), it was difficult to delimit the case's time. Although this research focuses on the 2012 census failure, the subsequent 2017 census and the very characteristics of policy failures (whose perception varies over time), exceeded the study's scope. The interviews were conducted in 2017 and 2018, but the failure episode's effects continued influencing policy and the INE and the emergence of other events linked to the case. The analysis of these new events was advantageous in terms of the richness of information collected. However, the thoroughness of the examination made time limits of the case more diffuse.
Another limitation pointed to the relationship between failure and learning. This study is about understanding policy failure; nevertheless, the 2017 census and the very nature of failures (which implicitly refers to learning), created new edges in that direction. The case exhibited several lessons from the mistakes made in 2012, such as INE's internal organization to deal with the census, the importance of collaboration and articulation with other actors, the training strategy, efficient supervision, and control system and a policy of transparency throughout the process. However, neither the 2017 census nor learning from failure analysis were at the central focus of this study; therefore, this dissertation did not deepen the learning dimension. It remains a future challenge.

Also, there are some limitations related to possible biases. On the one hand, the study was carried out in a context where the census already had a failure frame, requiring constant vigilance to this and other possible biases, using validity mechanisms. On the other hand, as in all qualitative research, the researcher's characteristics—political view, disciplinary perspective, gender, personality—may have influenced the study at some point—information gathering, interviewing, analysis, writing, etc. While the investigation applied diverse validity mechanisms, including permanent reflexivity, it is important to remember that this dissertation still is a single researcher study; therefore, the researcher's interests and characteristics bound the whole research process.

Finally, the Lenses Framework is a powerful figure in this dissertation, but it is not intended to be the only way to analyze policy failures, the most explanatory, or the most comprehensive. For now, it is more a way of observing to understand a complex phenomenon, but it is undoubtedly an analytical framework feasible to refine.
10.6. Further Research

This dissertation provides several opportunities to investigate further and deepen several topics, such as, the nature and characteristics of policy failure, learning from failures, the census policy. Below are some interesting topics for future academic and applied research.

Without a doubt, an attractive research opportunity is to investigate the 2022 census endeavor under the Lenses Framework, i.e. observing the characteristics of the next census policy, the INE configuration for the census task, the coordination organizations involved, and the influence of political, social, and institutional contexts on the census development. The 2022 census will again be under the de jure methodology—the one used in 2012—and also, it will be a more complex and longer questionnaire than the short version applied in 2017. In addition to the planning and logistical complexities, there are challenges in politics, communication, coordination, and participation, among many others. Besides, it is particularly interesting to study the link between the 2012 census failure, the 2017 census experience, and the transfer of those lessons learned in the 2022 version. The 2022 census study would allow us to go deeper into the repercussions of the 2012 failure, the different learning types, as well as how the judgment over failure unfolds over time.

As pointed out in the study, Chile was not the only country facing difficulties problems in the 2010 census round, various countries in the region also had significant difficulties. Policy failures are messy, and the incentives are not in the understanding of that complexity. Therefore, beyond explanations and predominant narratives in each country’s census failure, a more in-depth analysis could foster a better understanding of the particularities faced by each country, but also those common features in the region. From
here, an interesting research opportunity is a comparative study on census failures—such as Paraguay, Peru, or Colombia—analyzing similarities, differences, and how those experiences reveal unexplored insights for preventing census mistakes.

Consequently, this dissertation also opens up study opportunities on census policies in the Latin American context. The study drew attention to the importance of international collaboration to develop successful censuses, but especially to learn from mistakes and prevent failure. Therefore, another research topic is to explore the formal agencies, but also informal mechanisms of information and cooperation in Latin America. These findings will allow making better use of existing bodies, to make more use of existing strengths, and promote better and new collaboration strategies for Latin American countries.

This study revealed tensions over the need to have a better legal body for the INE, especially regarding political independence. After seven years of the census failure case and other scandals linked to the INE figures, the bill to strengthen the INE's institutionality is still "resting" in Congress. Thus, a future research topic is to delve into the relationship between policy controversies and legislative dynamics. That is, exploring how the policy polemics—such as the 2012 census—promote or impede the progression of problems on the public agenda and the role of political actors and the media.

Policy failure is an emerging field of study mainly carried out by developed countries. However, the Latin American region suffers as many failures as other countries, and given the ever-present scarcity of resources, it is even more critical to prevent policy failures. It is important to continue investigating and promoting further research, both on policy failures and policy learning. For this, paramount is the collaboration between researchers in sharing
theoretical perspectives, identifying cases, developing comparative studies and building, little by little, a corpus of Latin American knowledge.

Another topic for future research in Chile points to a failure in other policy areas. The study evinced how the context of growing criticism toward market-oriented policies affected the judgment of policy failure on the census. The census was not the only policy labeled as a failure in the past ten or maybe 20 years. Consequently, another research topic is to explore further the ideas of failure in other policy areas, such as the water-rights market, health insurance, urban motorway concessions, and especially the country's pension savings administration system (AFP according to the Spanish acronym). The events of the social outburst in Chile in October 2019, the subsequent social and economic crisis, and the pandemic's ravages reemphasize the importance of an ongoing and multi-perspective analysis of the country's critical policies.

In the same line, another topic for further exploration is crisis management on different policy failures. The failures will continue to exist, but the extension and damage they cause may vary depending on the controversy management. At the height of the crisis, policymakers make bad decisions, do not listen to dissenting views, do not ask for help, and ignore the warning signs. From a distance, questions arise, such as: Why did they not react on time? However, many elements are involved in the confusion, which are difficult to recognize amid a crisis. As this dissertation revealed, that is precisely the characteristic of failures, they are convoluted and somehow also misleading. Therefore, based on a retrospective and critical analysis of policy failure cases, a further study focusing on identifying moments, critical factors, decision dynamics, and contexts that contributed to the failure, and therefore, could constitute turning points.
Another area of future studies aims to explore different applications. A first study topic refers to learnings toward prevention and better management of failure events, particularly in Chilean settings. This implies to explore the meanings and interpretation of Chilean decision makers regarding the census case, and from that reflection, extract pertinent lessons, learning that makes sense to them and their practices. Along the same lines, another investigation edge refers to delving into the different ways of interpreting and observing policy problems, identifying critical moments or elements that could work as "warning signs," and contribute to addressing these complicated policy situations in a better way. Therefore, the whole emphasis here is to delve into the actual policymaking dynamics and context.

The analytical generalizability of case studies allows a particular reflection from the case, fostering questions, insights, and even transfer learning from the case to other settings. Another attractive opportunity of this dissertation is to develop a teaching case for public policy students and policymakers—including a paper and methodology. The case of the failure of the 2012 census in Chile allows for the study of the complex nature of policy failures and to foster thorough analysis and lessons drawn.

Finally, a cross-cutting concern of this dissertation is the relationship between technical or academic knowledge and decision making. Hence, another topic of study is investigating the mechanisms, formats, and instruments of the transfer and diffusion of knowledge toward policymaking, but at the same time, to study the other way around, that is, the transfer of the policymakers' experiences and practices to academia. With this renewed perspective, the challenge is to analyze the characteristics of these mechanisms, their relevance, facilitators, and barriers. In order to better prevent, better react to, and overcome
policy failures, a "traditional academic approach" is not enough. Under this study's pragmatic approach, it is crucial to advance toward building connections, or "bridges" between academic knowledge, and decision-making. For that, both academics and policymakers should make their contributions, which probably would require different research strategies; without a doubt, this is something for further exploration.
APPENDICES

APPENDIX N.1: INTERVIEW GUIDELINES

APPENDIX N.2: ADDITIONAL INFORMATION ABOUT THE INTERVIEWS

APPENDIX N.3: IRB APPROVAL

APPENDIX N.4: MAPS OF THEMES ACCORDING TO DIFFERENT LENS

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APPENDIX N.6: INE ORGANIZATIONAL CHARTS

APPENDIX N.7: COMPLEMENTARY CENSUS INFORMATION

APPENDIX N.8: RELEVANT THEMES IN MULTI-LENS ANALYSIS
APPENDIX N.1.
INTERVIEW GUIDELINES

Interview Guideline: INE Directors and High officials

Identification of the interviewee
What is/was your relationship with the INE? When did you start this involvement? Can you describe your position or your connection with the organization?
What was your relationship with the census 2012? What was your role?

Formulation of the policy
How was the census prepared for 2012? Who was involved in the formulation of the policy? Can you describe how the formulation of the 2012 census was?

Actors, organizations, and stakeholders over time
Who were the stakeholders involved in the implementation of the 2012 census? In your opinion, who had critical participation in the Census? How?
What are the relevant relationships with other institutions?

Policy goals and expectations
In your opinion, what were the expectations about the 2012 census? Why? Once the policy launched, how was the perception of the complexity of the implementation?
How do you describe the commitment to the census among relevant actors?

Hierarchy, policy arrangements, and control
How was the overall structure to carry out the census? Can you describe the mechanisms of supervision for the census? How did that work? Why?

Actors and capabilities
How would you describe the professionals in the INE? At the moment of the 2012 census, what was your opinion about the abilities to run the census?

Leadership
How would you describe the type of leadership in the INE regularly? How was that leadership regarding the census 2012? Can you give us examples of leadership styles?

Organizational culture, climate, and public value
For someone outside the organization, how would you describe the main features of the INE? How is this institution from inside? What can you say about the public role of the INE?
How do you describe the INE atmosphere of work INE regularly? How during the census 2012?

Power and political dynamics support/opposition to the policy
How would you describe the political environment inside the INE? How do you describe the political situation during the 2012 census?
What is the role of partisan politics in this institution? How does that operate?

How do you describe the support/opposition to the census? Who supported, and who did not? Why? How?

**Availability and allocation of resources**

What about the availability of funds to carry out the census? What about human resources and capabilities?

What were other resources critical to the implementation of the census? Why?

**Achievement of the goals and polemic**

What is your opinion about the results of the census? Why do you think it happened?

What do you think about the polemic regarding the results census? What do you think about the reports and other inquiries?

**Failure**

Do you think that the policy was a failure? Why?

What are the chances of other situations like the census 2012 happening again? Why?

**Complementary questions about the economic, social, and political context**

What was the social, political, and economic situation at the moment of the census implementation? What was the perception of those situations' problems? Can you recall any facts that happened previously and during the census?

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**Interview Guideline: INE Census Team**

**Identification of the interviewee**

What is/was your relationship with the INE? When did you start this involvement with the INE?

What was your relationship with the census 2012? How would you describe your role?

**History of the Census**

How was the policy of the census carried out in the past? In your opinion, what were their most distinguishing characteristics?

**Formulation of the policy**

How was the census prepared for 2012? Who was involved in the formulation of the policy? Can you describe the formulation of the 2012 census?

**Actors, organizations, and stakeholders over time**

Who were the stakeholders involved in the implementation of the 2012 census? In your opinion, who had critical participation in the Census? How?

What are the relevant relationships with other institutions?

**Policy goals and expectations**

What were the expectations about the 2012 census? Why? Once the policy launched, how was the perception of the complexity of the implementation?

How do you describe the commitment with the census among the census team and other relevant actors?

**Hierarchy, policy arrangements, and control**

How was the overall structure to carry out the census? How did that work? Why?
How was the relationship between levels of the enumeration arrangement?
Can you describe the mechanisms of monitoring and control of the enumeration? How did they work?

**Communication and coordination**

How do different units or individuals in the INE coordinate? What is the most common modality? How do you describe the coordination and communication for the census 2012?

**Implementation according to the plan**

How do you describe the overall implementation of the census? What are the main difficulties faced by the census? Was there any unexpected situation? Which one?

**Power and political dynamics support/opposition to the policy**

How would you describe the political environment inside the INE on a general basis? How do you explain the political situation during the 2012 census?

How do you describe the support/opposition to the census? Who supported, and who did not? Why? How?

**Availability and allocation of resources**

What about the availability of funds to carry out the census? In your opinion, what other resources were critical to the implementation of the census? Why?

**Leadership and capabilities**

How would you describe the profile of professionals in the INE? At the moment of the 2012 census, what was your opinion about the abilities to run the census?

How would you describe the type of leadership in the INE regularly? How was that leadership regarding the census 2012? Can you give us examples of leadership styles?

**Achievement of the goals and polemic**

What is your opinion about the results of the census? Why do you think it happened?

What do you think about the polemic regarding the results census? What do you think about the reports and other inquiries?

**Failure**

Do you think that the policy was a failure? Why?

What are the chances of other situations like the census 2012 happening again? Why?

**Complementary questions about the economic, social and political context**

What was the social, political, and economic situation at the moment of the census implementation? What was the perception of those situations' problems? Can you recall any facts that happened previously and during the census?
Interview Guideline: Other organizations

Identification of the interviewee
Can you describe your organization? What is your job? When did you start this involvement with the INE?
What was your relationship with the census 2012? How would you describe your role?

Actors, organizations, and stakeholders
How would you describe the relationship of your organization with the INE on a general basis? How about the census 2012? Can you give examples of the way that collaboration worked? What is your opinion about the commitment to the census among participants?
Who were the stakeholders involved in the implementation of the 2012 census? In your opinion, who had critical participation in the Census?

Policy goals and expectations
From your agency, what were the expectations regarding the 2012 census? Why? Once the policy started, how was the perception of the complexity of the implementation?

Leadership and capabilities
How would you describe the profile of professionals in the INE? At the moment of the 2012 census, what was your opinion about the abilities to run the census?
What do you think about INE leadership? How was that leadership for the census 2012?

Power and political dynamics support/opposition to the policy
In your opinion, how was the political environment during the 2012 census?
How do you describe the support/opposition to the census implementation? Who supported, and who did not? How?

Availability and allocation of resources
What is your opinion about the availability of funds to carry out the census 2012? What were other resources critical to the implementation of the census? Why?

Achievement of the goals and polemic
What is your opinion about the results of the census? Why do you think it happened?
What do you think about the polemic regarding the results census? What do you think about the reports and other inquiries?

Failure
Do you think that the policy was a failure? Why?
What are the chances of other situations like the census 2012 happening again? Why?

Complementary questions about the economic, social and political context
What was the social, political, and economic situation at the moment of the census implementation? What was the perception of those situations' problems? Can you recall any facts that happened previously and during the census?
Interview Guideline: Scholars and other Experts

**Identification of the interviewee**

What was your relationship with the census 2012? How would you describe your position/role?

**Achievement of the goals and polemic**

What is your opinion about the results of the census? Why do you think it happened?

What do you think about the polemic regarding the results census? What do you think about the reports and other inquiries?

**Failure**

Do you think that the policy was a failure? Why?

What are the chances of other situations like the census 2012 happening again? Why?

**The economic, social, and political context**

What was the social, political, and financial situation at the moment of the census implementation? What was the perception of those situations' problems? Can you recall any facts that happened previously and during the census?

*Based on the nature of the relationship of the interviewee with the census or the INE, there are more specific questions (available in previous guidelines).*
Interview Guideline: Post Failure

Identification of the interviewee

What was your relationship with the policy of the census 2012? How would you describe your position/relationship with the census 2012?

Census formulation and implementation

Before your involvement with the census case, what was your opinion about the process of elaboration of the 2012 census? And what about the process of enumeration?

Census Polemic and Inquiry

Can you describe your role regarding the inquiry of the census results? When did this involvement start? Who were the individuals involved in this investigation? In your opinion, who had critical participation in the investigation?

Can you describe the Inquiry process? What elements facilitated or impeded the evaluation? What is the role of partisan politics in the inquiry process? How do you describe the support/opposition to the inquiry process? Who supported, and who did not?

What is your opinion about how the consequences/impact of your inquiry?

If you could start this inquiry process again, would you do something different? What? Why?

What is the contribution of your inquiry? What about the contribution of other investigations?

Failure

In sum, what is your opinion about the results of the policy? Why do you think it happened? Do you think that the census 2012 was a failure? Why?

What are the chances of other situations like the census 2012 happening again? Why?

Complementary questions about the economic, social and political context

What was the social, political, and financial situation at the moment of the census implementation? What was the perception of those situations' problems? Can you recall any facts that happened previously or during the census?
# Appendix N.2.
## Additional Information about the Interviews

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Source: Own elaboration
December 7, 2017

Maria Angelica Pavez Garcia Public Policy and Public Affairs

RE: Your application dated 4/3/2017 regarding study number 2017077: Using Lenses to Understand Policy Failure. The Case of the 2012 Census in Chile

Dear Ms. Pavez Garcia:

I have reviewed your study listed above and have determined that this study qualifies as exempt from review under the following guideline: 101(B)(2) Educational surveys/anonymous surveys. You are free to conduct your study without further reporting to the University of Massachusetts Boston IRB.

If you decide to modify the project in such a way that it may no longer qualify for the exemption, submit a modification request to the IRB for review before the implementation of the modified research project.

Thank you for keeping the IRB informed of your activities.

Sincerely,

Sharon Wang, CIP, CIM Senior IRB Administrator
This appendix presents theme maps developed as part of the qualitative content analysis performed. The colored boxes are the first study themes, which come from the theoretical framework and interview guidelines. Later, other themes or codes (presented as colorless boxes) were created as part of identifying new ideas and reviewing codes, themes, and sub-themes. These maps reflect the process of analysis, and do not necessarily constitute the results of this research. Below are the theme maps of the policy, organizational and societal lens.

Census formulation

Policy Goals and Expectations
- Definitions of Goals
  - High Prestige and Technical Quality
  - Rushed Decisions
  - Low Commitment to the goals
  - High expectations
- Expectations

Resources
- Census Additional Resources
- Budget
  - INE Authorities and Advisors
- INE
  - INE Officials
  - Census Team
- Government and other agencies
  - Absence of UN collaboration

Actors

Change Strategy decision
- Triggers of the strategy change
  - New Government
  - Student Movement
  - Census Team Weakness
  - Nat.Census Commission Approval
- The Legitimacy of census policy change
  - Congress Approval Extra Budget
  - Absence of INE opposition

De Facto vs. De jure
- International Standards
- Pros and Cons
- Regional Trend
- High Complexity
- High Public Valuation of de Facto Census

PolicyLens (Part 1): Formation
- Lack of Planning
- Lack of Experience
- Lack of participation in the decision
- Sense of exclusion
- Authoritative Decision
- Reminiscences of the dictatorship
- Missing Budget
- Insufficient Resources
- Media Coverage
- Lack of continuity
- Disconnection from the census project
- Different Visions
- Isolation
- Government Promotes new Census
- INE Ignores international experience
- Government of excellence
- Boycott the Piñera Census

- **Resources**
  - Additional Budget
  - 10% Budget Reduction
  - Outsource Recruitment
  - Selection of Censistas by the INE
  - Recruitment Campaign

- **Census Preparations**
  - Refusal to Request more Resources
  - Professional Profile Censista
  - INE Internal Struggles

- **Recruitment**
  - Poor Calculations
  - Budgetary Adjustment Decisions
  - High Workload

- **Training**
  - Low Censistas Attendance
  - Low Citizen Engagement

- **Census Begins**
  - De jure Census Tensions
  - Censistas Resignations
  - Growing Disappointment Feeling

- **Top-Down Census Organization**
  - Questionaries and Group Folder
  - de facto Census Practices
  - Better Quality, Safe and Professional

- **The census is underway**
  - Censistas Turnover
  - Waiting Enumeration
  - Difficult Access Areas

- **Census**
  - Waiting Enumeration
  - Censistas Resignations
  - Hiring Replacements

- **De jure census Tensions**
  - Misclassifications of Absent Residents
  - Recovering Data Strategies
  - Increasing concern over quality data

- **Pollsters Contracts and Incentives**
  - Inadequacy of Census Hours
  - Contracts Modifications

- **Control and Supervision**
  - Enumeration Delay
  - Growing conflict and anxiety

- **Salaries and Payment**
  - Ambiguous Communication
  - Delay on Progress Registration
  - High Enumeration Pressure

- **Control System Use**
  - Census Salary Confusion
  - Ambiguous Communication
  - Extension Time

- **Delay on Census Payments**
  - Censistas Manifestations
  - INE Administrative Burden

- **Lack of Experience**
  - Bad Practices
  - High Workload

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Census Evaluation

- Census Technical Issues
  - INE Internal Technical Discussions
  - Lack of Transparency
  - Weakness Census Process
  - Increasing distrust over data

- Census Results
  - INE Internal Technical Discussions
  - Lack of Transparency
  - Addendums
  - Increasing distrust over data

- Data Manipulation Denounce
  - INE CEO Denounce on the Press
  - Public Polemic
  - President Ordered Census Inquiry
  - New Census Urgency
  - Waste of Public Resources
  - Media Coverage

- National Commission Experts
  - Selection of Members
  - Reputation and Expertise
  - reporter
  - Public Debate
  - Media Coverage

- Pillera Apologized for Census Mistakes
  - Rejection of Census Data
  - Census to the Trash can
  - Endless Debate

- International Consultants Commission
  - Distrust Previous Commission
  - Census Good Quality
  - Acceptable Errors
  - Wrong Imputation Methods

- Chamber of Deputies Inquiry
  - Political Tone
  - Public Hearings
  - High Media Coverage
  - Main Responsible: Labbé

- Other Inquiries
  - Prosecutors Office Investigation
  - Political Sides
  - Save The Census

  - Comptroller Office Audit
  - Administrative Irregularities

  - INE Technical Audit
  - Census Data Quality
  - Several Inconsistencies

  - 2012 Census Inadequacy
Diagram N.24. Organizational Lens (Part 1)
Diagram N.25. Organizational Lens (Part 2)

INE

Organizational Climate

INE Strengths

INE vs. Central Bank

Motivation and Skills

Labor Conditions

Chilean Public Administration

Different Type of Contracts

Rigidity

Better Salaries & Working Conditions

Central Bank Prestige

Central Bank attracts the most skilled

INE Inferiority Complex

INE Inferiority Model

Low professional skills

INE is a "two-bit" service

INE Low self Esteem

INE Strengths

High Commitment

Identity

Absence of Leadership

Tensions

New Government Stress

New Director

Authoritative Leadership

Census

Leakage of Confidential Information

Technical Disputes

CPI

Increasing Tensions

Sub-Directorate Cabezas Fired

Power Struggles

Labbé Team vs. INE High Officials

CEO as Mediator

INE CEO

GroupThink

Small Cohesive Group

Head of census

The Morality of the group

The Rationale

The idea of Political Boycott

Overestimation of the group

Labbé and Advisors

The stereotypes of out-groups

The idea of Enemies

Closed Mindedness

Illusion of Invulnerability

The Best Census

The Stereotypes of Out-groups

Illusion of Superiority

Uniformity of the groups

Mechanisms of Pressure

Information Incomplete

Direct Pressure on Dissenters
Diagram N.26. Societal Lens (Part 1)

Chilean Context

Political Context

Pillera Government

- Right-wing Government after 20 years
- The Government of "the best"

Four-year Presidential Term

- Short term policymaking
- Intense Electoral Competition

- High expectations
- Market-oriented ideas
- Reminding of Dictatorship
- Political obsession

- Data Controversy
- CASEN Polemic (poverty figures)
- Census figures

- Lack of planning
- Harmful for quality policies
- Lack of statistical priority

- Governing Coalition Political Crisis
- Ignoring warnings about census problems
- Mismanagement of the crisis

- Transparency Law
- Procedures & norms as an impediment
- 2002 vs. 2012 census scenario

- Procurement Law
- Lack of time for the census
- Old practices vs. New Requirements

- New Procedures & Practices
- High Standards
- Older vs Newer Public Officials

- Tensions
- Clash of Styles and values

- The Government of "the best"
- Focus on Efficiency

- High pressure on the census
- Facebook Twitter

- Social Media

- The New Rules of the Game

- Chilean State and Modernization

- Unexpected Power
- Always Alert
- High speed

- Political 'Obsession'
- 24/7

- Political Candidate
- Everything is public
- Completely Different scenario

- High Standards
- Old practices vs. New Requirements
- High speed
- Focus on difficulties and problems
Diagram N.27. Societal Lens (Part 2)

World Census Context

- High Costs
- census Concerns
- Growing non-response Rates
- Difficult access
- Lower participation
- New social realties
- The Twilights of the census
- Data protection
- Use of Administrative Records
- Trend in Europe
- Few innovations

Traditional Census

- de Facto-de Jure
- Transitions
- High omission & low quality
- Lack of Autonomy
- Leadership weaknesses
- Argentina, Uruguay, Paraguay
- Perú, Colombia, Bolivia
- Lack of Funding
- Scarcity of technical Capabilities

Case of census failure

- Chilean Census as part of an LA trend
- Similarities with the Chilean case
- Idea of failure
- Difficult transition to de jure census
- Inquiry commissions
- Repetition
- CELADE Support

Latin-American Censuses

- New Methodologies
- Few innovations
- The lost Decade
- Transitions
- High omission & low quality
- Lack of Autonomy
- Leadership weaknesses
- Argentina, Uruguay, Paraguay
- Perú, Colombia, Bolivia
- Lack of Funding
- Scarcity of technical Capabilities

International Census Context

- New Methodologies
- Few innovations
- The lost Decade
- Transitions
- High omission & low quality
- Lack of Autonomy
- Leadership weaknesses
- Argentina, Uruguay, Paraguay
- Perú, Colombia, Bolivia
- Lack of Funding
- Scarcity of technical Capabilities

NSOs Statistical Institutionality

- Statistical Capabilities in Latin-America
- Several weaknesses
- Save the Census
- Different Strategies
- CELADE Support

Student Social Movement 2011-2012

- Clash of Logics
- Citizenship Malaise
- Paradigm Shift
- Freedom, Participation and Social Justice
- Market-oriented Policies
- New census & efficiency ideas
- Old census & Democratic Values
- Against Market Oriented ideas
- Claim for participation and democracy
- Change of census strategy
- The failure of the Model

Free Public Education, of quality, and for all

- New demands to reduce inequalities
- Protests marching on the streets
- High pressure to Piñera Government
- New census & efficiency ideas
- Old census & Democratic Values
- Change of census Strategy
- The failure of the Model

Citizenship Malaise

- Clash of Logics
- Freedom, Participation and Social Justice
- Old census & Democratic Values
- Against Market Oriented ideas
- Claim for participation and democracy
- Change of census strategy
- The failure of the Model

High Pressure to Piñera Government

- Clash of Logics
- Citizenship Malaise
- Paradigm Shift
- Freedom, Participation and Social Justice
- Market-oriented Policies
- New census & efficiency ideas
- Old census & Democratic Values
- Against Market Oriented ideas
- Claim for participation and democracy
- Change of census strategy
- The failure of the Model
APPENDIX N.5.
MILESTONES OF THE 2012 CENSUS CASE

Below is the timeline of the milestones and main events of the 2012 Census and the National Institute of Statistics INE, from 2010 to 2019.

2010

- **March**: President Sebastián Piñera took office after 20 years of center-left governments; this is the first right-wing government since Pinochet’s dictatorship.
- **August**: New government fired INE Director Mariana Scholnik.
- **October**: President Piñera appointed Francisco Labbé as the new Director of the INE.
- **October**: Argentina ran a de facto census.
- **September-December**: Uruguay performed its first the de jure census.
- **November**: Labbé appointed Mariana Alcérreca as the CEO of the INE, a new position especially created by the Director. She has been working as a half time advisor since November 2010.

2011

- **January**: The pre-census for de facto modality started.
- **May**: Student mobilizations begins. Protesters all over the country demanded quality public education, free, and for all. These marches will continue until the end of 2012.
- **June**: Evaristo Castro, head of census, resigned. Advisor Eduardo Carrasco is the new Head of the Census.
- **June**: Labbé appointed Mariana Alcérreca as the CEO of the INE, a new position especially created by the Director. She has been working as a half time advisor since November 2010.
- **July**: Change of president's cabinet. In the ministry of economy, Juan Andrés Fontaine leaves the fold, and Pablo Longueira enters, who would later become a presidential candidate.
- **August**: INE authorities decided to change the census strategy from de facto to de jure.
- **August**: Internal census INE committee (Sub-directorates) analyzed the methodology change and proposed postponing the census.
- **August**: INE authorities presented the change of methodology to the ministry of economy.
- **September**: CELADE warned Director Labbé against the risks and difficulties of the census methodology change and proposed to postpone the census.
- **September**: Expert international Canadian advisor Jacob Ryten warned INE authorities regarding the methodology change. According to Ryten, the major challenge would be recruitment.
- **September**: Government officially announced the census strategy change toward the de jure strategy.
- **October**: The pre-census process finished.
- **November**: Eduardo Carrasco, head of the census project, visited Paraguay to observe the preparations for the new de jure census implementation.
- **November**: Census Team finally approved the last version of the census questionnaire, including the changes for the de jure approach.

2012

- **January**: INE began the recruitment process of census takers. The company Trabajando.com took over the applications.
January- Census Team and INE authorities disputed the amount of salary for census takers.

February- INE central and regional offices selected applicants for territorial managers, supervisors, and census takers. Census takers’ training began.

March- INE authorities inform a budget reduction of 10%. INE Regional offices had to adapt the initial census plan.

April- Census takers denounce changes in working conditions.

April- 2012 Census begins.

April- Censistas denounced changes in salary. The government explained and solved the exposes.

April- Censistas resignations and turnover started. The availability of trained census takers became a permanent concern for the census team.

May & June- Several INE internal reports of lag in the census process.

May & June- INE managers identified misclassifications of dwelling.

June- Internal INE reports estimated a shortage of population count.

June- Census Team initiated a particular plan to correct census errors and recover incorrect classified dwellings.

June- The government announced two weeks census extension from the initial plan.

July- INE finished the enumeration process after a second extension period.

July- Disagreements within the INE regarding the presentation of results.

July- INE Sub-directorates warned about the high figures of absent residents and unoccupied dwellings. They also pointed out the UN recommendation regarding the presentation of census data.

July- CEPAL delivered poverty measurement analysis reaching 15%. Government authorities asked CEPAL to modify the calculation and added a new variable, which led to a decrease in the figure to 14.4%.

August- INE officials and Labbé team argued intensively over the census coverage. Director Labbé proposed the thesis of new constructions of dwellings as the explanation’s coverage differences.

August- The government proudly announced the historical coverage of the census (at the household level). Data didn’t properly distinguish between estimated and actual censused population.

August- INE internal disputes regarding census data delivered.

August-September- CASEN polemic came to light. Due to the controversy, UN high officials resigned, and the CEPAL decided to end the collaboration with the Chilean government on poverty matters.

October- INE ran the Post-Enumeration Survey to measure census omission and other errors. However, this survey was useless, as was applied with too much time lag of enumeration.

October- Paraguay began its first version of the de jure census.

November- Bolivia ran the de jure census.

2013

January- The government proposed to the Congress a bill for the strengthening and autonomy of the INE.

March- Data analysis ended. First census results. INE internal disputed over the census coverage.

March- Consultant Eduardo Arriaga performed a first demographic analysis and other quality tests to the census database and warned about significant inconsistencies of the data.

March- CEO and INE managers warned the ministry of economy about some census problems.

March- The CEO Alcérreca first attempt to resign because of significant discrepancies over the data handling.

March- The President, the minister of Economy, and Director of the INE proudly presented the final census results.

April- High official from the Social Development Ministry requested clarification regarding the census data presented.

April- Two newspapers presented Census results before the official release. Confidential data leakage problem. INE managers warned Director Labbé about the confidentiality threat.

April- INE presented three errata regarding census results.

April- Prestigious economist from the BCI Bank published a report questioning the INE methodology to measure the CPI. The news triggered an academic debate regarding methods and INE capabilities.

April- There were Heated disputes between Labbé team and INE Managers regarding CPI figures, census data, and other internal technical concerns.

April- Labbé fired Marcela Cabezas, the head of the technical sub-directorate at the INE.

April- Several politicians and technical actors questioned census results.
• April- High officials of the INE post a public letter to the Director, exposing their concern over Labbé’s lack of technical decisions, leadership, and the damage for the INE.
• April- Presidential candidate of the right-wing coalition Laurence Golborne dropped his candidacy due to several accusations of lack of integrity.
• April- CEO Mariana Alcérreca denounced the investigative journalism newspaper CIPER, the numerous flaws of the census data delivered, accusing of "manipulation" of data.
• April- CEO Mariana Alcérreca resigned to the INE.
• April- chamber of deputies ordered a special investigation about the census data and the INE.
• April- INE started an internal audit regarding the leakage of census information.
• April- INE Director Francisco Labbé and his close advisors resigned from the INE.
• April- Due the denouncements, the government ordered a special investigation and summoned five national experts to run an external inquiry about the census data, known as the national commission.
• April- INE Authorities asked the prosecutor office to run an investigation for possible crimes falsification of a public instrument, embezzlement of public funds, and "eventual violation of statistical confidentiality."
• April- The Economist Juan Eduardo Coeymans was appointed as the new INE Director.
• June- Primaries elections in Chile. Michelle Bachelet and Pablo Longueira won their respective coalitions.
• July- Presidential candidacy of the right-wing coalition, Pablo Longueira, dropped his candidacy due to severe depression.
• August- After weeks without a presidential candidate, Evelyn Mattei became the presidential candidate of the Alliance.
• August- The national commission of experts presented the results of the three-month inquiry of the census data and process, denouncing the numerous flaws and recommending not using the data and running a new census as soon as possible.
• August- Huge controversy regarding the commission results. “save the census” vs. "census to the trash can" perspectives.
• August- President Piñera apologized to the Chileans for census errors.
• August- INE Director ordered a new inquiry, looking for a “second opinion.”
• August- Government announced a second census evaluation by EUROSTAT and the World Bank. However, those international agencies didn’t agree to carry out the investigation.
• September- INE hired three international census consultants, recommended by EUROSTAT, known as the International commission of inquiry. They started a three-month evaluation.
• November- Commission of international consultants delivered their results. Acknowledging several weaknesses of the information gathered, the commission pointed out census data is useful for public policy decisions.
• November- Based on the international consultant’s report, INE and Government authorities emphasized the validity of the census and dismissed the need for a new census.
• November & December- There was an intense political and technical debate regarding the different results of the inquiry commissions. The discussion lasted for more than three years.
• November- Presidential candidate Michelle Bachelet announced the need for a new census.
• December- INE authorities declared the 2012 census is valid.
• December- Presidential election. Michelle Bachelet President for the second time.

2014
• January- chamber of deputies commission of inquiry finished the extensive investigation over the 2012 census, identifying several irregularities and blaming Francisco Labbé and advisors for the census failure.
• February- INE published the revised results of the census.
• March- Michelle Bachelet presidential term began.
• March- New Government discharged Juan Eduardo Coeymans and appointed the economist Ximena Clark as the new INE Director.
• March- Four deputies asked the General Comptroller to run an extensive inquiry about the Census 2012 from the administrative and legal point of view.
• March- New INE Director Ximena Clark ordered a technical audit to the 2012 census data.
• March- Census webpage was pulled down until the results of INE investigations.
• March- General Comptroller of the Republic presented the results of their especial evaluation of the INE.
- **March**- New government announced a new census would take place in 2016 or 2017.
- **May**- INE appointed Ninoska Damíanovic as the new head of the 2017 census. Also, Odette Tacla, an expert in censuses, supported the census team as an advisor.
- **June**- CDE started a new investigation process against Francisco Labbé.
- **September**- INE presented the results of the special audit to the 2012 census database. The report concludes the Census data did not accomplish the minimal requirements and quality standards of a census.
- **October**- head of census Damíanovic and advisor Tacla resigned due to problems with the INE Director Clark.

### 2015

- **February**- General Comptroller presented audit results performed to the recruitment process of the 2012 census, identifying severe and several irregularities.
- **March**- After five months without Head of the census, INE Director appointed the engineer Patricia Morales.
- **June**- General Comptroller of the Republic presented the results of the integrated 2012 census' audit identifying numerous irregularities and liabilities of the census process and confirming the inappropriateness of the process.
- **September-December**- Politicians and other actors asserted data manipulation of the National Employment survey figures. Then, a complex technical debate regarding the ability of the INE recently modified survey to capture new dynamics of the labor market.
- **November**- INE announced the new census will take place in April 2017 under the "de facto" strategy.
- **November**- The Bachelet government sponsored a new bill for the statistical institutionality of the country. This project reinstated the previous bill delivered by the Piñera administration.
- **December**- INE announced censuses would run every ten years but also intercensal counts every five years.

### 2016

- **January**- The prosecutor's office desisted further investigation and concluded there weren't legal foundations to determine crime in the census case.
- **January**- INE began the preparation for the 2017 census with abbreviated questionnaires and de facto approach.
- **February**- INE started the first stage of the pre-census 2017.
- **May**- Head of the census project, Patricia Morales was fired, and INE Director appointed Carolina Cavada, former Director Clark advisor, as the Head of the 2017 Census.
- **June**- INE started the final stage of the pre-census 2017.

### 2017

- **January**- INE Director presented census planning, progression, and contingency plans to a special commission of the chamber of deputies.
- **March-April**- Some scholars and former INE authorities intensively criticized the 2017 census, arguing inadequate preparation, higher costs, and lack of volunteers.
- **April**- The de facto 2017 census on April 19th. Authorities, scholars, stakeholders, public officials, and citizenship positively evaluated the census day.
- **August**- INE Director Ximena Clark presented the first count of the census.
- **April**- INE kept censusing missing areas.
- **May**- chamber of deputies approved the bill for the strengthening of the INE and the National Statistic System. The law passed to the senate for the next legislation step.
- **October**- Perú ran a de facto census.
- **December**- INE Director Clark delivered the results of the 2017 census.

### 2018

- **January-March**- ANFINE INE official public associations denounced lack of participation in INE and asked the incoming Minister of Economy to remove Director Clark and to validate census 2012 data.
- **January & June**- Colombia run a de jure census.
- **March**- Director Clark was fired, and Government appointed the economist Guillermo Pattillo as the new INE Director.
• May- INE Director Pattillo presented the 2017 census final results.
• December- Central Bank special report objected to the INE employment figures. According to the Bank, the INE did not measure the contribution of immigrants in the labor market. Director Pattillo recognized the survey's weaknesses.
• December- Reacting to the employment polemic, politicians and other actors stressed the relevance of advancing in the INE bill and ask Piñera government to push for the passage of the law.

2019
• January-August- New INE internal audit unit identified inconsistencies regarding the CPI figures. INE Director Pattillo filed a criminal denounce on the INE official responsible for the CPI process, accusing of "manipulation of data."
• August- Academics and politicians debated over Pattillo denouncement.
• August- INE began consultations and participative processes toward the design of the 2022 census questions.
• October- Social outburst in Chile: equality, asking for equality and structural social and economic reforms.
• November- After a month of social protest, disturbances and violence all over the country, there was national political agreement in Congress for a new constitution. The process would start in April 2020 with a plebiscite to decide the mechanism of elaboration.
From the year 2012 to 2018, no significant changes in the organizational structure of the INE. Below are the organizational charts for 2017, and the 2019 new organizational chart, after the restructuring process started in June 2019.

Diagram N.28. INE Organizational Chart in 2017

Source: Integral Management Balance 2017 (INE, 2019)
Diagram N.29. INE Organizational Chart in 2019

Source: INE, 2020
Table N.16. General Characteristics of the 2010 Census Round in Latin America

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<td>De Jure</td>
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<td>Standard and Internet</td>
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Table N.17. Census Undercount by Country (DA AND PES)

Evaluation According to Indirect (Demographic Analysis) and Direct (Post-Enumeration Surveys) (%). Based on National Statistical Offices 1950-2010 Data

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Source: Méndez & Sacco, 2016, p.10
Table N.18. Census Undercount by Country (UN Projections)

Census Figures (%) Compared to UN Population Projections

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Source: Méndez & Sacco, 2016, p.10-11
Table N.19. Statistical National Capabilities Index

Selected Latin-American Countries by Dimension (2015-2016)

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APPENDIX N.8.
RELEVANT THEMES IN MULTI-LENSES ANALYSIS

Diagram N.30. Relevant Themes in Multi-Lens Analysis
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