



UNIVERSITY OF BRASÍLIA - UNB
FACULTY OF ECONOMICS, MANAGEMENT, ACCOUNTING AND
PUBLIC POLICY MANAGEMENT (FACE)
MANAGEMENT GRADUATE PROGRAM (PPGA)

JEOVAN ASSIS DA SILVA

**The Interrelationship between Courts and Administration:
boundaries and factors affecting the judicial review of
regulatory decisions in Brazil**

Brasília – DF

2021

JEOVAN ASSIS DA SILVA

**The Interrelationship between Courts and Administration:
boundaries and factors affecting the judicial review of
regulatory decisions in Brazil**

Doctoral dissertation submitted to the Management Graduate Program at the University of Brasilia in partial fulfilment of the requirements for the degree of Ph.D. in Management.

Advisor: Dr. Tomas de Aquino Guimarães

Brasília – DF

2021

UNIVERSITY OF BRASÍLIA - UNB
FACULTY OF ECONOMICS, MANAGEMENT, ACCOUNTING AND
PUBLIC POLICY MANAGEMENT (FACE)
MANAGEMENT GRADUATE PROGRAM (PPGA)

**The Interrelationship between Courts and Administration:
boundaries and factors affecting the judicial review of
regulatory decisions in Brazil**

JEOVAN ASSIS DA SILVA

Approved in January 25th, 2021.

Prof. Dr. Tomas de Aquino Guimaraes, University of Brasilia – UnB, Advisor

Prof. Dra. Alketa Peci, Fundação Getúlio Vargas – FGV/EBAPE, Rio de Janeiro

Prof. Dr. Reinaldo Guerreiro, University of São Paulo – USP, São Paulo

Prof. Dra. Patrícia Guarnieri, University of Brasilia - UnB

Prof. Dr. Adalmir de Oliveira Gomes, University of Brasilia - UnB

For my mother (Margarida) and my father (Francisco, *in memoriam*)

For my siblings (Luíza Mônica and Alexandre)

For my little niece (Ana Brisa)

ACKNOWLEDGEMENTS

The end of a cycle. Back in 2016, I felt stuck and stagnant and I was looking for broaden my horizons. I was also eager to resume an academic life as well as passionate to research the enhanced role of courts in public administration. The doctorate years were quite challenging – harder than I had imagined – but now I see that life seemed easier. Then 2020 came. A global pandemic has shaken the world and a delicate family issue has arisen but “thus far the Lord has helped us” (1 Samuel 7:12). The doctorate years and recent events have taught me a lot about resilience and faith.

Despite the doctoral journey being mostly a lonely one, it would be unfair if I would not thank several people for their valuable help. First of all, I would like to thank my supervisor, Professor Tomas Aquino Guimaraes for his continuous guidance and advice. I am very indebted to him for carefully reading and providing accurate comments on my drafts of this work. By completing this journey, he becomes a source of inspiration for me in relation to research integrity. I am also grateful to the examiners who have analyzed the theoretical essay and the project of this doctoral dissertation and contributed with valuable observations, questions and insights.

Understanding the relationship between courts and administration would not have been possible without the help of the professionals who actually work at federal regulatory agencies and at federal courts everyday. I am very grateful for the judges, experts in regulation and federal attorneys who kindly allowed me to spoke with them. The identities of these individuals are not reported but their contributions are the essence of this research.

I thank Stenio, Aleksandra and Leila for our invaluable friendship during my years of academic isolation. I thank Andersson and Simone Tiêssa, the best doctorate colleagues – and now friends – which I was pleased to meet. I also thank Renata Meneses de Melo which I met virtually and helped so much during the preparation for Chapter 3.

I am very grateful to Guilherme Viana, Carolina Prata, Neide de Sordi and Pedro Florêncio. Back in 2010, we formed a great team at the Department of Judicial Studies at the National Council of Justice. I miss so much those times but I really cherish our friendship that remains until nowadays.

I have also been grateful for the support of PPGA/UnB and the AJUS research group (especially Professor Adalmir Gomes) for their advice on the construction of this thesis and provision of an intellectually stimulating environment.

I appreciate the support of the former Ministry of Planning (current Ministry of Economy) for the participation of members of the EPPGG's career in Master and PhD programs. Future evidence-based public policies will surely take benefit from the Long-Term Training Program (PCLD).

Several persons helped me in so many different ways for the completion of this work and I am really indebted to them: Guilherme Viana, Neide de Sordi, Adalana Brenna Duarte, Jhonatan Ferreira, Julia Maurmann Ximenes, Eliane Luz, Gislayne Goulart, Gabriel Ferreira, José Roberto Ferretti and Yuri (TRF1). I also thank José J. Filho for the development of the TRF1 and TRF3 programming packages which are now open and available to researchers nationwide.

Finally, I would not have been able to complete this work without the love of my family.

The end of a cycle. The beginning of a new one with new projects and dreams of brighter days.

ABSTRACT

The judicial review of regulatory decisions brings relevant issues concerning the role of courts in modern democracies. Regulatory agencies around the world are frequently associated with making better use of expertise and experts in order to make relevant economic and technical choices even in highly sensitive domains. However, courts also play a pivotal role in controlling administrative behavior and in defining important issues of regulatory policies. In order to address the phenomenon, three interdependent studies are incorporated in this doctoral thesis. The first one is an essay that brings a literature review, as well as relevant theoretical lenses for analyzing the interactions between regulatory agencies and courts. The theoretical essay provided two propositions: *Proposition 1: The overlapping of authority in the regulatory space leads to conflicts between legal control by courts and the application of regulatory standards by regulatory agencies.* *Proposition 2: Judicial review of decisions made by regulatory agencies involves conflicts of choice between regulatory and adjudicatory processes and technical-administrative and legal rationalities.* The objective of the second study was to explore divergences and boundaries perceptions among key state actors in regulatory litigation. The main theoretical frameworks were regulatory space and institutional logics. Data analysis was performed through interviews with judges and regulatory agencies' officials and attorneys. The findings indicated that judicial review of regulatory decision-making involves a fluid interpretation work and overlapping roles in defining the way regulatory functions should be organized. Finally, the third study discusses factors affecting judicial decisions on regulatory matters in Brazil. Law and Economics approach guided the analyses. Data analysis was carried out using an original database with 1,353 rulings issued by two Brazilian federal courts in the period from 2010 to 2019. The results show that the length of the proceedings had a relevant impact on the judicial behavior, as well as courts are prone to analyzing legal-procedural issues rather than reviewing regulators' policies, and that a focus on those aspects favors rulings against those bodies. In each thesis article, studies are discussed and their findings are stated.

Keywords: regulatory agencies, regulation, courts, judicial review, judicial decision-making.

LIST OF FIGURES

- Figure 1** – Descending hierarchical classification (dendrogram) and their respective most significant words 44
- Figure 2** – Factorial Correspondence Analysis classes and subjects and organizations 45

LIST OF TABLES

Table 1 – Synthesis of the studies that make up the research	14
Table 2 – Interviewees data	42
Table 3 – Regulatory bodies and distribution of judicial cases in the selected courts	62
Table 4 – Analysis of the content of a decision and criteria for classification	64
Table 5 – Variables of the research	66
Table 6 – Outcome of court rulings related to regulatory agencies	67
Table 7 – Court rulings by subject and grounds of the decision	67
Table 8 – Outcome of court rulings by agency	68
Table 9 – Analysis models of the logistic regression	68
Table 10 – Results of the logistic regression model	69

Summary

1 INTRODUCTION	11
1.2 Research relevance	16
2 REGULATORY AGENCIES AND COURTS: INTERACTIONS BETWEEN ADMINISTRATION AND JUSTICE	19
2.1 Introduction	19
2.2 Theoretical background	22
2.3 Conclusions and recommendations.....	32
3 JUDICIAL REVIEW OF REGULATORY MATTERS: DIVERGENCES AND BOUNDARIES BETWEEN COURTS AND REGULATORY AGENCIES.....	35
3.1 Introduction	35
3.2 Theoretical background	37
3.3 Method	41
3.4 Results and Discussion	43
3.5 Conclusion	53
4 FACTORS AFFECTING JUDICIAL DECISIONS ON REGULATORY MATTERS	56
4.1 Introduction	56
4.2 Theoretical background	58
4.3 Data and Method	60
4.4 Results and discussion	66
4.5 Conclusion	71
5 CONCLUSIONS AND RECOMMENDATIONS	73
5. 1 Main contributions	73
5. 2 Main findings	75
5.3 Limitations and Research agenda	78
5.4 Practical policy recommendations	79
References.....	82
APPENDIX	91

1 INTRODUCTION

The widespread establishment of independent regulatory agencies is considered to be the main public governance innovation that has taken place in advanced capitalist democracies in recent decades (Christensen & Lægreid, 2006; Maggetti, 2014). Courts hold a unique position in every constitutional order because by default they are the link between democracy and the rule of law. As the contemporary public administration is becoming more complex and specialized, judicial deference (or judicial self-constraint) to the administration has developed in a greater or lesser degree in every democratic system (Zhu, 2019). However, several countries have experienced an enhancement of the role of courts in the regulatory arena and judiciary's involvement in regulating the regulators (Mantzari, 2016) and this phenomenon has not been sufficiently explored in academic research (Deller & Vantaggiato, 2015; Silva & Guimaraes, 2020).

Judicial review of regulatory matters can be understood as the scrutiny by the judicial branch of decisions and actions of regulatory agencies in order to verify their compliance with laws, fundamental rights and principles of public law, as well as if they acted within the discretion of their duties. The peculiar features of regulatory institutions make them particularly suitable for investigating the ways in which judicial review and legal norms impinge upon the field of administration. Regulatory agencies are a sub-group of central agencies in the public sector and some of their main tasks are to control the power of the market, ensure fair competition, and protect consumers and citizens by guiding and implementing policy regulation (Christensen & Lægreid, 2006). Independent regulatory agencies often have their own budgets, as well as are established as legal entities under public law that are “structurally disaggregated” from civil service and usually dissociated from the electoral cycle (Verschuerre et al., 2006). Independent regulatory bodies represent the most autonomous type of organizations that possess and exercise some grant of public authority (Maggetti, 2014).

Regulatory authorities usually operate in highly sophisticated areas that are often comprehensible only to a narrow circle of experts and bureaucrats who are dealing with them on a daily operational basis (e.g., telecommunications, energy, capital markets), consequently multiplying information asymmetry problems in this area (Bajakic & Kos, 2016). Therefore, the knowledge and experience of judges has become a matter of concern with regard to the increased complexity of evidence and technical and scientific insights needed for an adequate understanding of evidence-based regulatory policies (Mak, 2012).

Countries worldwide have indeed delegated complex problems to regulatory agencies and the possibility of judicial review exposes weaknesses in both regulatory bodies and in the Judiciary (Tapia & Cordero, 2015). Regulations are often established under scenarios of uncertainty in which the interactions between regulatory agencies and courts would hardly be productive, since the more technical the issue under review, the less comfortable and confident judges would feel to assess a decision (Colburn, 2012).

However, based on its formal authority to override decisions of regulatory agencies, the judiciary relies on an important ex post control mechanism that would even make up for accountability deficits derived from delegating regulatory powers to independent agencies (Gerardin & Petit 2010; Maggetti 2010; Bell, 2019). In fostering arguments of procedural rationality, for example, judicial review provides an important balance, enabling courts to protect people against arbitrary government intervention, when complexity or the politically salient nature of a decision prevents the court from assessing the substantive merits of the case (Popelier, 2012). A great challenge is to determine to what extent judicial interference with the policy decisions made in regulation can be accepted. Therefore, a tension exists between the idea that courts should show deference to administrative regulatory decisions and the idea that policy choices made in regulation should also be subject to strict review by the judiciary (Mak, 2012).

Interactions between courts and regulatory agencies have prompted a conflicting environment, as judges and bureaucrats are not neutral players, since they have personal interests and preferences stemming mainly from their interpretative powers (Napolitano, 2014), as well as they have a system of values that can interfere in their decisions. Therefore, tensions between technical-administrative expertise and law are quite frequent, since regulation would occur through organizational filters and it would be necessary to pay attention to the environment in which the agencies operate (Short, 2012).

Studies on the relationship between courts and public administration and also on the degree of judicial deference by courts in relation to decisions taken by regulatory bodies are relatively common in the United States. However, these studies are more often published in legal journals and have a predominantly jurisprudential focus that sets them apart from other social sciences (Osorio & O'Leary, 2017). Additionally, the rather peculiar American tradition of broadly delegating regulatory powers to independent agencies (Scott, 2001) paves the way for undertaking research in empirical contexts different from this US reality.

The degree of judicial deference employed by courts seems to be dynamic and hypotheses

related to its dependence on different characteristics such as the relative importance of the matter judicially reviewed, the underlying regulatory policy or the level of technicality involved still need to be further examined (Fix, 2014; Osorio & O'Leary, 2016; Zhu, 2019). Different approaches reinforce possibilities of research on how judges and courts operationalize and modulate self-restraint or take a more active role when undertaking judicial review.

A set of academic literature has awakened to empirical analyzes and interactions between agencies and courts. For example, some studies prioritize aspects of efficiency and performance in judicial review (Wright & Diveley, 2013; Bajakić & Kos, 2016) while other researches discuss how the Judiciary branch deals with issues where technical or scientific aspects are crucial, such as: decisions on drug efficacy and mandatory health care assistance (Ramalho, 2016; Hawkins & Alvarez Rosete, 2019); tariff revisions (Silva & Costa Júnior, 2011); telecommunications policies (Faraco, Pereira Neto & Coutinho, 2016); and regulation of the electricity sector (Monteiro, Ravana, & Conde, 2013; Sampaio & Wada, 2016;). However, despite the contribution of these studies, there is still a scarcity of studies that explore the state actors' divergences about regulatory disputes, as well as research on explanatory factors and conditions of judicial deference in different contexts.

Brazil is a suitable locus for investigating the phenomenon. The Brazilian Constitution allows extensive judicial review of administrative acts since no threat to a right may be excluded from judicial review (article 5, XXXV) and any party in a relationship with the public administration enjoys the protection of due process of law. Regulatory decisions are therefore subject to judicial review in “generalist” courts and may be even completely overruled. Back in 2011, the Brazilian National Council of Justice identified a dysfunctional model of judicial review of regulatory decisions, with sluggishness and judicial uncertainty as its main characteristics (CNJ, 2011). The problem remains to date, as judicial deference to technical discretion seems to depend on case-to-case basis and the precise scope of judicial review regarding agency rulemaking is still unclear (Carvalho, Rondon & Marques, 2020).

The diffusion movement of independent regulatory agencies in Brazil has accompanied a structural change in public administration stemming from privatization reforms that sought to reduce the strong direct and indirect of Brazilian State presence in economic and social life (Prado, 2016). Since 1995, dozens of regulatory entities at the federal, state and municipal levels have been created in the country, based on a model inspired by the US context, even though the national adaptation has been based on marked differences in conception (Peci, 2014).

In this sense, many aspects remain underexplored regarding to factors upon divergence in regulatory interpretation in the institutional-legal environment. In order to fill in this gap, the objective of this research is describing factors that affect the judicial review on regulatory matters in Brazil, as well as spotting divergences and boundaries among prominent players in regulatory litigation.

1.1 Description of the studies of the thesis

This research encompasses three studies in the form of interdependent articles. Each article has its own introduction, theoretical framework, method, results and conclusion sections. With a view to achieving the objective of the research, the thesis is built in such a way aiming at coherence and dialogue between its distinct but interrelated chapters. Table 1 presents the studies that compose the thesis and summarizes their main aspects.

Table 1 – Synthesis of the studies that make up the research

Chapter	2	3	4
Type	Theoretical	Theoretical-Empirical	Theoretical-Empirical
Research question	What is the state of the art of academic literature on relations between the Executive and the Judiciary regarding decisions in regulatory matters?	How judges, officials and attorneys from regulatory agencies diverge and how they set boundaries in the judicial review of regulatory matters?	Which factors affect judicial decisions regulatory matters in Brazil?
Objective	To discuss the theoretical framework, and state a research agenda and propositions	To explore the relationship between the judiciary and regulatory authorities in relation to judicial review of regulatory matters	To explore factors that affect judicial decisions on regulatory matters in Brazil
Main approach	Qualitative	Qualitative	Quantitative
Data and sources	Scientific articles published in peer-reviewed journals and available in the following databases: Spell, Scielo, SAGE, Scopus, JSTOR e <i>Web of Science</i>	Semi-structured interviews with 21 Brazilian professionals involved with regulatory litigation (judges and agencies' officials and attorneys)	1,353 decisions of the Brazilian Federal Courts of the 1 st Region (TRF1) and of the 3 rd Region (TRF3)

Chapter	2	3	4
Analysis	Literature review	Analysis of the textual corpus carried out by the software IRAMUTEQ	Logistic regression analysis (with decision ruling in favor or against the agency as dependent variable)

Source: Prepared by the author

As Table 2 points out, Chapter two presents a literature review on the judicial review of decisions issued by regulatory agencies, with a focus on interdisciplinary studies. Chapter two also addresses the theoretical lenses that guide the following empirical studies, namely sociological institutionalism and Law and Economics approach. The sociological approach of the institutionalist theory supported Chapter three which explores divergences and boundaries among judiciary and regulatory agencies upon judicial review on regulatory matters. Law and Economics approach guided Chapter four because it is a theoretical framework which engages in relevant comparisons between regulatory agencies and courts and their distinct approaches regarding regulation. Additionally, Chapter two suggests a research agenda and two propositions of research were stated:

- **Proposition 1:** The overlapping of authority in the regulatory space leads to conflicts between legal control by courts and the application of regulatory standards by regulatory agencies.
- **Proposition 2:** Judicial review of decisions made by regulatory agencies involves conflicts of choice between regulatory and adjudicatory processes and technical-administrative and legal rationalities.

Chapter three has a theoretical-empirical nature and discusses how key players – officials, judges and agencies’ attorneys – give meanings to the judicialization of regulatory decision-making. The institutionalist regulatory space concept highlights that regulation needs to be understood in relational terms and that there is no clear demarcation between the different players, including public authorities (Hancher & Moran, 1989; Lodge, 2016). The notion of institutional logics as it was approached by Stryker (1994; 2000) was also addressed because that author discusses the mobilization of attorneys and scientists around competing legal and scientific rationales for regulatory agencies acts and procedures. According to Stryker (2000) organizational fields characterized by multiple institutional logics are prone to fragmentation, goal-ambiguity and instability. The chapter builds on semi-structured interviews with 21

professionals who have experience in working, judging or following-up regulatory litigation cases in Brazil. Interviews' textual content has been investigated by adopting the qualitative software IRAMUTEQ. The study examines the interaction between courts and regulatory agencies and the blurred nature of boundaries and overlapping authorities in the regulatory space. By uncovering an intricate relationship among the different actors, the study explores how expertise-oriented regulatory policy-making is being accommodated by the judicial system.

Chapter four explores factors affecting judicial decisions on regulatory matters. Law and Economics approach seemed appropriate for framing the analysis because it offers a complementary approach to the institutional theoretical lenses examined in Chapter three. It is founded in assumptions of equilibrium and efficiency which are crucial to explaining behavior in institutions that co-ordinates interactions in the society (Fix-Fierro, 2003), such as courts and regulatory agencies. Information from 1,353 judicial review appeals against decisions issued by nine Brazilian regulatory agencies, judged by two prominent Brazilian federal courts in the 2010-2019 period were analyzed. A tailor-made dataset - made possible through data and text mining techniques- allowed the testing of hypothesis about drivers of judicial decision-making on regulatory matters. Data analysis used a logistic regression with decision ruling in favor or against the agency as dependent variable in association with a range of independent variables, such as length of the proceedings, amount in dispute and courts. Empirical findings revealed that judicial scrutiny seems to have a preferred focus on some regulatory tasks as well as courts are more prone to issuing rulings against agencies in specific subjects.

Lastly the findings are summarized in the Conclusion section, which discusses the propositions presented in Chapter two as well as it brings recommendations and practical implications for public managers and justice practitioners. Suggestions for further research are also presented in the final section.

1.2 Research relevance

Nowadays there is a broad literature on regulation as a managerial, legal and social phenomenon and about its functions, regulatory design and techniques (Baldwin, Cave & Lodge, 2010; Jordana et al., 2018). Regarding independent regulatory authorities, and given their theoretical and empirical importance, these bodies have been quite extensively studied from the point of view of their creation, diffusion, formal and the facto independence, accountability, legitimacy, efficiency and performance (Christensen & Laegreid, 2006,

Maggetti, 2014). However, a broader understanding of the Regulatory State (Majone, 1994; Levi-faur, 2005) also involve a closer look at the interactions and relationships between regulatory agencies and courts (Deller & Vantaggiato, 2015). This is mainly because it is a discussion of high economic and social relevance, since regulatory decisions – and their potential invalidation by court rulings - have a major bearing on citizens' daily lives (Ginsburg, 2009).

Most of the studies regarding judicial review of regulation have focused on the United States or Western European countries, with little reference to the phenomenon in other contexts (Mejia, 2020). The relatively recent adhesion of the developing world to the regulatory agency model is worthy to study since it may reveal new aspects of the Regulatory State (Dubash & Morgan, 2012). It is also important to mention that findings related to the North American literature on judicial review cannot be extrapolated to the required extent to other empirical realities and other legal systems beyond Common Law. In this sense, factors upon divergence in regulatory interpretation in different institutional-legal environments require further research. The present research seeks to contribute in bringing the Brazilian empirical reality and civil law experience case aiming at adding a novel perspective for comparative studies. Additionally, a comparative approach across regulators of different sectors was adopted in this study.

Theoretically, the thesis contributes to the academic knowledge by exploring two theories that offer plausible lenses to understand the phenomenon under discussion, namely the institutional theory and the Law and Economics approach. Despite the fact that public and private interest theories (Morgan & Yeung, 2007) and the principal-agent framework (Maggetti & Papadopoulos, 2016; Turner, 2017) are quite influential regarding regulatory issues, they also present limitations in explaining the relation between agencies and courts. On one hand, the institutionalist notions of regulatory space (Hancher & Moran, 1989; Vibert, 2014) and institutional logics (Stryker, 1994; 2000) are quite useful for explaining conflicts among players and their different regulatory rationales. On the other hand, Law and Economics approach addresses some of the main issues related to the distinct roles performed by regulators and courts in regulation, because of their extensive comparisons between these institutions.

In methodological terms, this thesis seeks to contribute to the discussion at hand by building a database of decisions made by two relevant Brazilian appellate courts, thereby improving our understanding of judicial behavior in the regulation field. Data and texts of judicial decisions are key inputs for approaching the backdrop of the interactions between courts and regulatory agencies. The process of opening data sets belonging to the judicial branch

is widely believed to be slower compared to those belonging to the legislative and executive branches (Marković & Gostojić, 2018) but Brazilian courts have made considerable efforts in compiling information related to judicial proceedings (Louro, Santos & Zanquetto Filho, 2018). Despite several shortcomings in relation to the accessibility and to the standardization of data provided, mainly when it comes to academic purposes, recent data and text mining techniques have helped to overcome important research obstacles (Castro, 2017). Some of these techniques were adopted in this research and they enable several benefits to the study of judicial behavior, such as: operationalization of a large number of decisions in a shorter time; feasibility of a tailor-made database; and less dependence on jurisprudence repositories built on not very clear criteria.

The research also provides further insights into the public administration research on “regulocracies” (Levi-faur, 2011), as it approached seasoned officials and enquired about their views on a delicate issue regarding the shadow of judicial review over their tasks. The implementation of the regulatory agency model in Brazil has been accompanied by considerable efforts and investments towards a high-qualified career staff. By investigating their interaction with courts, the research addresses how relevant agencies’ capacities have been challenged – with potential impacts on the quality of the public policies implemented by them as well on their autonomy.

This study also contributes to the literature on the research field of the Administration of Justice which encompasses a growing interest among academics, justice practitioners and public managers but has been scarcely studied by the management community. The concept of Administration of Justice involves different levels of analysis and in its societal and broadest level it involves the relationship between the executive, legislative and judicial branches of government and concerns about their limits and the requirements for balance between them (Guimaraes, Gomes & Guarido Filho, 2018).

Finally, it is important to highlight that parts of this thesis have been presented at scientific conferences as well as submitted to scientific journals, which were fruitful opportunities for discussions and improvements to the research as a whole. Chapter two was presented at the Annual Meeting on Law and Society held in Washington D.C. in 2019 and it was published by *Cadernos EBAPE.BR* in 2020 (volume 18 number 3). Chapter four was presented at the General Conference of the European Consortium for Political Research (ECPR) held virtually in August 2020 and submitted to the journal *Utilities Policy*. Chapter three was submitted to the journal *Law & Policy*.

2 REGULATORY AGENCIES AND COURTS: INTERACTIONS BETWEEN ADMINISTRATION AND JUSTICE¹

Abstract

The interrelationships between regulatory agencies and judicial courts generally have a high impact on social relations. However, there is little empirical research and a need for greater systematization of knowledge from a multidisciplinary perspective. This essay discusses the main tensions between the executive and judicial branches of government in decisions about the regulatory activity. The discussion is facilitated through the main theoretical lenses and previous studies on the application to the phenomena. The relationship between agencies and courts is marked by divisions, and the institutional approach to the regulatory space and reflections stimulated by law and economics theory, among other theoretical approaches, are very useful for interpreting institutional tensions in this relationship. The literature on judicial review of regulatory agency decisions points to factors that explain judicial deference or motivate a more prominent role of courts, as well as on topics related to: a) court involvement with technical and scientific issues; b) efficiency and performance; c) calculated behaviors; d) transaction costs; and e) cost-benefit analysis. A research agenda is suggested to explore the perceptions of key players about regulatory disputes, and factors and conditions that explain judicial deference in different contexts.

Keywords: Regulatory agencies. Courts. Judicial Review. Judicial Deference. Administration of Justice.

2.1 Introduction

Judicial review of administrative rulings on regulatory matters occurs frequently in western democracies (Bignami, 2016) and the relationship between regulatory agencies and courts is often marked by misalignment, conflicts, and disputes of authority (Vibert, 2014). Understanding how these players interact with each other in the regulatory process in environments where the institutional designs are evolving (Prado, 2016) can contribute to a better understanding of how the regulatory state that emerged in the late 20th century works (Majone, 1994; Levi-faur, 2005).

Regulatory activity has been the focus of attention of several disciplines, including public administration, law, political science, economics, and sociology (Windholz, 2018). Regulation has become a distinct field of academic research with theories, concepts, and specialized knowledge of its own (Morgan & Yeung, 2007). Although different currents of thought see the regulatory state from different perspectives, some of its main characteristics can be identified (Lodge & Wegrich, 2012): confidence in regulation justified by an emphasis on efficiency-

¹ Chapter 2 was published in Cadernos EBAPE.BR in 2020 (volume 18 number 3).

related values, greater dependence of the state on private suppliers in the provision of public services, and creation of autonomous regulatory agencies to oversee economic activities.

Scholars of public administration have been urged to reflect on the phenomenon of regulation, and to go beyond traditional economic approaches (Lodge & Wegrich, 2012). Although there are many academic papers that analyze regulatory agencies (Jordana, Fernández & Bianculli, 2018), the importance of researching the interactions between agencies, courts, and the legislative branch has been stressed for a long time (Noll, 1985).

By sharing responsibility for inducing and shaping behaviors with the law, regulatory and judicial systems are intrinsically connected (Schmidt, 2005; Cohn, 2011; Windholz, 2018). Regulatory decisions usually have a redistributive function that produces winners and losers and encourages litigation in the courts (Dubash & Morgan, 2012). Although the recent literature on regulation has focused on the increasing role of non-government players and self-regulatory processes (Black, 2002), this does not negate the importance of the legal perspective on regulation. On the contrary, it stimulates new discussions about the relationship between these players, the state, and the law (Morgan & Yeung, 2007).

Research on the relationship between the courts and public administration and also on the extent to which courts defer to decisions of regulatory agencies is common in the U.S., but the North American tradition of delegating normative powers to agencies (Scott, 2001) opens up space for research in different empirical and multidisciplinary contexts. This paper is based on the understanding that discussions on judicial control of public administration fall under the broader context of the relationship between the executive and judicial branches of government in contemporary states and are not restricted to the area of law, which often plays the key role in legal aspects of regulation (Schmidt, 2004).

Judicial courts become part of the regulatory process when they review rules or intervene more actively in regulatory policies. Consequently, the judiciary has been an important actor in regulatory activity (Kingsbury & Donaldson, 2013): a) judicial contestation can be used as an instrument by different interest groups in conflicts; b) courts are called upon to give their opinion on regulatory standards, which influences the process of defining and legitimizing these policies; and c) the judiciary branch is called upon to arbitrate conflicts between different agencies with regulatory functions and can play a pedagogical role for the actors involved, especially in institutional environments that are still being built, as in the case of developing countries.

Examples of these different roles have emerged around the world. The Constitutional Court of Colombia developed a new rationale for regulation in aspects of economic efficiency related to a new water supply system provided by private entities, in addition to requiring greater public participation in regulatory matters (Urueña, 2012). Courts in India have been called to take part in a dispute over the control of decision-making processes in the area of telecommunications and have made a better dialogue between different actors involved in regulation possible (Thiruvengadam & Joshi, 2012). In Indonesia, the Constitutional Court was called upon to decide conflicts arising from the privatization of the electricity industry and to restore state powers with regard to the provision of public services (Kinsbury & Donaldson, 2013).

Many regulatory agencies proliferated in Brazil in the wake of a structural change in public administration arising from reforms carried out from 1995 onward to reduce the direct and indirect involvement of the state in economic and social life (Peci, 2014; Prado, 2016). The Brazilian judicial branch, which under the Federal Constitution of 1988 (Article 5, Item XXXV) has the power to control administrative acts, has routinely been involved in regulatory processes such as: a) deciding arguments for or against the ratification of utility rate increases, with marked differences between decisions of first degree courts and appeal courts (Silva & Costa Júnior, 2011); b) complex arbitration processes between the consumer protection bodies and suppliers relating to technical matters in the electricity industry (Sampaio & Wada, 2016); c) trying to strike a balance between the public interest in health protection and the private interests of those involved in economic activities in the health care sector (Aith, 2016).

In Brazil, a study sponsored by the National Justice Council (CNJ, 2011) revealed several shortcomings in the model adopted in the country for judicial review of decisions made by regulatory agencies. The model is extremely slow (average time of four years of processing in the judicial branch) and there is legal uncertainty in the judicial review of regulatory decisions, with multiple changes in decisions through cancellations and confirmations during the proceedings. It became clear that judges did not share a clear position in relation to their role in this reviewing activity and were hesitant about the need to call in judicial experts. Judges have little incentive to review such cases, since, with a large backlog of cases before the courts, they are tempted to give priority to simpler cases. Because the decisions made by regulatory agencies are complex, judges seem to avoid facing more substantive issues and issues of principle in judgments, preferring to address formal and procedural issues.

Understanding the reasons for and impact of such dysfunctions involves reflection on the

interaction between regulatory agencies and the courts. This discussion goes beyond the debate on the judicialization of public policies, which focuses on the institutional role of judges and courts from the moment they are provoked to deliberate on such policies (Coutinho, 2013). According to some studies, the possibility of judicial review has major effects on administrative decisions and can trigger defensive behavior on the part of regulatory agencies (Li, 2012; Dragu & Board, 2015). In addition, the judicialization of public policies still focuses on social and constitutional issues, while regulatory matters raise tensions that are yet to be studied (Ginsburg, 2009). Therefore, there is no clear understanding of the factors leading the judiciary to play a more prominent role, or to adopt a posture of deference or self-restraint, in relation to decisions on regulatory matters.

This essay articulates a discussion of the main tensions in the relations between the executive and judiciary branches of government with respect to regulatory activity, as well as viewing the phenomenon through the main theoretical lenses and applying the state of the art of academic works on the subject. Finally, this paper proposes a research agenda to broaden understanding of the interrelationships between courts and regulatory agencies.

2.2 Theoretical background

Definitions of regulation vary according to how each field of knowledge addresses the topic and, because it is a comprehensive concept, the literature on the subject has made little progress in addressing conceptual issues and provides only few, rather abstract definitions (Koop & Lodge, 2015). However, some conceptualizations have gained interdisciplinary approval and are being widely used, including Selznick's definition of regulation as "sustained and focused control exercised by a public agency over activities that are valued by a community" (Selznick, 1985, p. 363). Selznick's definition has been criticized for lacking a more systemic view of regulation (Lodge & Wegrich, 2012).

Regulation can be examined from several theoretical perspectives, among which the following stand out (Morgan & Yeung, 2007): public interest theories; private interest theories; and institutional theories. Public and private interest theories have an economic bias and consider regulation from the perspective of market failures, of sectoral issues, or of actions undertaken by players in pursuit of the public interest, with no private or selfish intent, but that end as failures by, for example, allowing regulatory systems to be captured by economic agents (Baldwin, Cave & Lodge, 2010). Adaptations of transaction-cost theories and of the principal-

agent theory have also been applied to extend research on regulatory motivation and strategies (Levy & Spiller, 1996; Baldwin, Cave & Lodge, 2010). Institutional theories presuppose the need to study regulation as involving more than an activity or agency, focusing on broader institutional dynamics in which the actions and intentions of regulatory actors are immersed (Baldwin, Cave & Lodge, 2010; Windholz, 2018). This discussion is presented below.

The contribution of institutional theory

According to the sociological institutional approach institutions are social constructs that do not necessarily correspond to organizations, but rather to norms and conventions with the status of rules in social thought and action, which may or may not have a legal background but are seen as guaranteed and legitimate rules (Meyer & Rowan, 1977; DiMaggio & Powell, 1992). Through this analysis, in the field of regulation, agencies do not operate in an institutional vacuum, and in their quest for prestige and legitimation, they are sensitive to and responsive to signals from other actors, such as courts, legislative committees, the press, and so on (Noll, 1985).

With an emphasis on the role of organizations and institutions, formal and informal rules guide regulatory studies from an institutionalist perspective (Morgan & Yeung, 2007). In this sense, the law and the legal rules in regulatory processes are just another set of rules that coexist with others from other systems and are shaped by different bureaucratic and organizational ethos. When defining the foundations of regulation, the legal environment may play a role beyond establishing legal doctrines and might operate at both more direct levels – in litigation and in defining legal rules – and less tangible levels, by affecting expectations about the form and operation of regulatory decision-making processes (Black, 1997). Therefore, the analysis of decision-making processes in the area of regulation should not be limited to the legal dimension, which cannot adequately capture the various elements and institutional influences involved in such processes. The institutional approach suggests that attention should be paid to extralegal aspects and to the broader cognitive structures of decision-makers (of their understandings and perceptions of environments and decision situations), which may be particularly relevant for empirical research on legal and regulatory processes.

The concept of “regulatory space” (Hancher & Moran, 1989) suggests that important resources for maintaining regulatory power and the exercise of regulatory capacities are dispersed or fragmented in society (Black, 1997). The regulatory space is a useful analytic

construct for describing and analyzing the environments in which regulation takes place (Hancher & Moran, 1989; Scott, 2001; Vibert, 2014; Windholz, 2018) and it organizes the discussion outside the traditional foci of regulatory instruments and techniques.

With regard to the **players** involved, it is assumed that the regulatory space is not solely made up of government players and public authorities, but it also includes non-government ones over whom the state may have influence, but cannot monopolize regulatory power (Hancher & Moran, 1989). However, countries with a Roman-German legal tradition place greater emphasis on the sovereignty of state entities, but, even at governmental level, authority in the regulatory space is scattered and regulation has a polycentric character (Windholz, 2018). This concept opens up opportunities for understanding the coordination between and responses from these players from the perspective of different values and interests (Schmidt, 2004).

Regarding to **resources**, the concept of regulatory space introduces the idea that different players contribute with important resources for government to exercise regulatory power (information, institutional credibility, political clout, among others). Resources in regulatory regimes are not, therefore, restricted to legal authority and the fact that several actors rely on other types of resources leads to challenging hierarchical concepts of regulation and highlights the interdependence among actors in the regulatory space (Scott, 2001). It is important to analyze conflicts in the regulatory space, the resources used to settle them, and how resources are shared among the different institutions involved (Hancher & Moran, 1989).

As for the **relationships**, cooperative and conflicting relationships in the practice of regulation influence how regulatory issues are identified and defined in the regulatory space and how the players involved interact with each other (Hancher & Moran, 1989). This space is characterized by complex horizontal relations and negotiated interdependence (Scott, 2001). Thus, the phenomenon of capture, which has been addressed in studies on regulation in the fields of economics and political science, can also be considered from the perspective of reciprocal behaviors through which regulators and regulated parties engage in exchanges (of information, for example).

A discussion of the concept of regulatory space has been provided recently, based on reflections on contemporary systems of authority (from the perspective of the exercise of power seen as legitimate) in the performance of regulatory activity (Vibert, 2014). This perspective emphasizes the importance of looking at regulatory activity from different angles and domains of authority, including that of the law in its relationship with technical regulatory bodies. Because a methodological concern was lacking in Hancher's and Moran's initial formulation of

the regulatory space concept, Vibert (2014) supports the notion that relationships in the regulatory space should be analyzed at a "meso" level as an intermediate link between the theorization of individual behaviors (which would also comprise individual regulating or regulated organizations) and the behavior of the system as a whole.

In organizational analyses, the regulatory space can be looked at from the following perspectives: a) the concept of "societal sector", which is defined as a set of organizations operating in the same domain and marked by similarities in their products, services, and functions and which have a critical bearing on the performance of a given focal organization (Scott & Meyer, 1991); b) the network theory, which examines systems of relationships in which players have different roles and how the nature of those relationships impacts behaviors and influences the outcome of public policies (Rowley, 1997; Berry, Brower, Choi et al., 2004); and c) the stakeholder theory, which explains how organizations respond to other stakeholders in the context of interdependent relationships and how these players influence the goals of a given organization (Gomes, Liddle & Gomes, 2010). Regulators, regulated parties, and courts must interpret regulation and adjust themselves to changes in the regulatory environment, so it is timely to investigate which factors mitigate or maximize divergences in interpretation in this network of actors (Randolph & Fetzner, 2018).

The concept of regulatory space provides fertile ground for discussing the interactions between regulatory agencies and the judiciary, as it suggests that not only information and resources are unevenly dispersed among players, but both formal authority (derived from legal instruments) and informal authority (derived from experience and information) are also fragmented. Despite claiming the right to deliberate on administrative matters in the last instance, courts might lose sight of the fact that regulatory authority is increasingly dispersed and that arbitrariness in this field can also be prevented through other channels (McDonald, 2004). The volume and technicality of regulatory rules lead to challenging situations in which defending legality, while important, is not always a core role, largely due to the risk of legal discretion compromising the predictability that is often desired in regulatory contexts.

A broad discussion of the interactions between regulatory agencies and courts must also address the different rationalities governing those institutions, which are particularly focused on other works of the regulatory literature. The discussion is presented in the following section.

The different rationalities governing regulatory agencies and courts

The law and economics approach highlights distinctions between regulatory agencies and courts. The law acts as a facilitator of exchange processes in society, as can remove impediments to private contracts by internalizing certain transaction costs (Cooter & Ulen, 2012). According to Coase's Theorem (Coase, 1960), the relationship between regulatory agencies and courts is initially skeptical about the presence and interference of regulatory agencies (Kessler, 2010). But this initial objection did not preclude further theoretical refinements that challenge the role of courts and saw judicial intervention as costly and even inappropriate (Kessler, 2010; Shleifer, 2010). Mixed models under which agencies and courts control regulation jointly create disadvantages such as slowness and duplication of costs, but these disadvantages are not be entirely disabling, as the two systems can be complementary (Posner, 2010).

Certain dimensions of conflict can be identified in the regulatory regimes enforced by agencies and courts (Posner, 2010): agencies tend to use preventive control and monitoring mechanisms, while courts apply intervention methods and tend to act retrospectively on violations or damages already suffered; agencies usually deal with clear rules, while courts deal with more open legal standards that are liable to more subjective interpretation; agencies carry out their work under the auspices of experts, while courts are composed of judges with a more generalist profile and background in law.

As a general rule, regulatory agencies rely on greater expertise for judging technical disputes than courts, which are usually more familiar with legal-procedural issues. Regulatory agencies are usually in a better position to mobilize relevant knowledge and information in their work and this expertise is more appropriate than that available to courts, although regulatory agencies have also been criticized for being overly dependent on information provided by regulated parties (Hall, Scott & Hood, 2000). Opportunities may be available for the judiciary to elicit technical input from experts brought by the parties to refute or defend analyses and evidence, but this procedure can be fragile and prone to manipulation in some cases (Posner, 2010).

By analyzing specific disputes and focusing on the parties to a particular dispute, courts are unable to evaluate objectives and outcomes of wider regulatory issues (Knight & Johnson, 2007). Regulators shape their actions broadly for an industry or economic sector as a whole, while courts are limited to the unique features of a concrete case (Posner, 2010). As a result, conflicts arise over decisions on particular cases and over the inherently generalist nature of

regulatory decisions and policies (Schauer & Zeckhauser, 2010).

The plural nature of administrative and judicial regulatory proceedings - which are marked by imperfect decision-making and complex technical disputes - suggests that comparative institutional analysis should be undertaken in studies of the interaction between regulatory agencies and the judiciary (Mantzari, 2016). Based on a theory of comparative institutional analysis (Komesar, 1997), it is suggested that, unlike the market and the political system, courts have unique attributes and formal requirements that limit the information judges receive and restrict their decision-making capacity. Courts should therefore be cautious about market or political decisions when the balance of biases or competences encourages an attitude of deference. However, this self-restraint can in some cases be made more flexible by other institutional factors, such as by specialized courts (Mantzari, 2016).

The occurrence of such self-restraint or judicial deference in regulatory matters has been studied extensively in North America and in a range of specific situations. Factors leading to greater deference by courts may include: the degree of insulation and time in operation of the regulatory agency (Meazell, 2012); the reputation of the regulatory agency (Maggetti & Papadopoulos, 2016); the excessive complexity of cases, which may even encourage "superdeference" on certain issues (Meazell, 2011); the thematic area of action and strategic behavior of the agencies with a view to anticipating future judicial decisions (Magill & Vermeule, 2011). There would be less judicial deference in cases of ideological divergence between regulatory agencies and courts, especially when the regulatory body reviews its own position over time (Givatti & Stephenson, 2011).

State of the art of the interaction between regulatory agencies and courts

Theoretical-empirical papers published in peer-reviewed journals between 2010 and July 2018 were selected for review. In this review, difficulties similar to those pointed out by Osorio and O'Leary (2017) were faced in conducting a literature review on the relationship between courts and the public administration. According to those authors, there are few studies on the subject in the social science literature in general and, in particular, in public administration journals. This discussion is more frequently addressed in legal journals and it can have the following weaknesses: a predominantly normative focus on jurisprudence and on the convenience of judicial intervention; little use of empirical data, and when such data is used, it is often for the purpose of corroborating doctrinal arguments; and excessive self-reference as a

result of scant dialogue with studies involving other social sciences.

The following keyword search terms were used (and translated into Portuguese or Spanish when necessary):

- “*regulatory agencies*” or “*administrative law*” and “*judicial review*” or “*court**” or “*judicial**”).

The searches were conducted in the Spell, Scielo, SAGE, Scopus, JSTOR, and Web of Science databases. The title and abstract of the identified papers were read and those that consisted only in theoretical discussions and analysis of jurisprudence or precedents were discarded. As a result of this filtering process, 10 theoretical-empirical papers were found, confirming that little research has been carried out into the role of courts in the area of regulation (Levi-faur, 2011) and the existence of aspects that are yet to be appropriately explored academically in this area (Dubash & Morgan, 2012; Prado, 2016; Windholz, 2018). Seven papers were added to the initial 10 using the "snowball" technique, based on checking their references. After those 17 papers were read and analyzed, the main research results were grouped under the themes listed below.

Judicial deference

One research analyzed ten empirical studies on judicial review of actions of regulatory agencies according to six different judicial doctrines or precedents (Pierce, 2011). The decisions of regulatory agencies were confirmed by federal courts in a high number of cases (in approximately 70 percent of cases), regardless of the doctrine invoked in the specific case. Therefore, variations in confirmation in judicial reviews would need to be explained by other factors, such as the following: procedural basis of the agency's decision; consistency of the position of the agency over time; judicial familiarity with the subject matter of the decision and ideological preferences of the judges involved.

Another paper challenges the dichotomy of applying judicial deference to decisions of regulatory agencies (Fix, 2014). According to this author, the political importance of the substantive issue being examined by the judiciary is a factor that adds complexity to the interactions between courts and agencies. The research was based on a sample of 852 cases decided upon between 1961 and 2002 using logistic regression. The results show that the level of deference is constant for "less important" cases, while for "prominent" cases it is strongly related to ideological compatibility between the court and the agency involved.

Judicial behavior

Three papers focused primarily on factors in regulatory systems that require the judiciary to play a more prominent role in regulation, especially to investigate the motivation of judges in cases involving regulation. The judiciary can play unconventional support roles by fostering communication and interaction between several regulatory institutions and assuming a pedagogical stance by reviewing the role of newly-established regulatory institutions (Urueña, 2012) or requesting explanations from the executive branch of government for the lack of a regulatory agency (Thiruvengadam & Joshi, 2012). Similarly, an empirical case study addressed the involvement of Chinese courts in dealing with environmental regulatory issues to try and understand the reasons for such involvement and how it affected the behavior of regulated parties (Zhang, 2016). Research of this kind develops case studies, is more descriptive, and makes theoretical comparisons based on regulation and theories of judicial behavior.

Involvement of courts in technical and scientific issues

Some papers discuss how the judiciary deals with regulatory issues where technical and scientific aspects are crucial. A study examined how the Colombian Supreme Court has played a proactive role in relation to health care issues, for example, decisions about drug efficacy and mandatory health care coverage by health insurance plans, often disregarding budgetary and financial arguments (Hawkins & Alvarez Rosete, 2017). In this investigation, the researchers conducted content analysis of interviews. A Brazilian study analyzed judicial control of a regulatory standard adopted by the National Health Agency for coverage of medical emergencies in health care plans (Ramalho, 2016). A review of the jurisprudence of appellate decisions of three courts of justice was carried out and the results show that judicial control was exercised in such a way that agency standards were systematically disregarded, leading to inter-institutional friction.

A third study pointed out that the increasing and rigorous engagement of courts in environmental regulation may lead to a constructive partnership between courts and agencies on complex scientific issues (Fisher, Pascual & Wagner, 2015). The courts could act as necessary critics, encouraging regulatory agencies to develop more solid accountability and governance mechanisms that would in turn improve judicial reviews and make them more

focused and consistent in a positive symbiotic relationship for both parties.

Another study (Baye & Wright, 2011) focused on the problem of lack of preparation of the judiciary to deal with antitrust issues, which increasingly require sophisticated predictions and calculations. The authors state that the economic complexity of cases increases the likelihood of appeals being filed, and that training judges is effective for simple proceedings, but less so for complex cases. The research also found that repeated exposure of judges to complex cases is not a substitute for training. Therefore, the usual procedure of establishing specialized courts is not as effective as one might think, as providing more advanced training and the assignment of experts by courts would have a more significant impact.

Efficiency and performance in mixed regulatory models (involving regulatory agencies and courts)

Two papers analyzed issues related to efficiency and performance in regulatory institutional designs characterized by the coexistence of regulatory agencies and courts. In litigation brought before courts against decisions of twelve Croatian regulatory agencies, rulings issued between 1995 and 2011 were analyzed (Bajakić & Kos, 2016). Aspects such as the winning party, percentage of success, costs involved, and duration of the proceedings were analyzed. Regulatory agencies won 82% of the cases and trend analysis indicated that they have been increasingly successful in confirming the legality of their decisions. This result is in line with the findings of other studies according to which there is a positive correlation between the technical or economic complexity of a regulatory proceeding and the percentage of court rulings in favor of regulatory agencies. A different path was suggested in a study that compared decisions by federal judges and commissioners of the Federal Trade Commission that went to federal appellate courts under US antitrust law (Wright & Diveley, 2013). The study tested whether the presumed higher degree of expertise involved in decisions of regulatory agencies would translate into fewer reversal decisions by the judiciary. The result indicated that the Commission's decisions were more likely to be both appealed against and annulled by a federal court.

Calculated behaviors

A set of studies drew attention to the possibility that regulatory agencies and litigants modulate their conduct in response to expectations about judicial positioning or for their own

benefit. A study in Brazil investigated the behavior of regulated companies operating in the electricity supply industry (Monteiro, Ravena & Conde, 2013). It identified the problem of competing regulatory instances that favor judicialization of public policies and procrastinating behavior, reducing the effectiveness of regulatory instruments. It found that there was a dysfunctional framework that allows enterprises to escape or postpone sanctions arising from non-compliance with contractual requirements.

Wagner (2010), based on a case study of the US Environmental Protection Agency, pointed to risks stemming from judicial oversight when courts are exposed to excessive information from parties attempting to capture and control the regulatory process. Rather than contributing to settling technical regulatory issues, collecting excessive and often complex information may involve calculated behavior that ends up discouraging substantive review by courts.

Another study indicated that regulatory agencies can avoid exposing themselves to judicial review by not bringing to justice cases with little chance of success due to contrary (Li, 2012). Much of the literature focuses on the outcome of administrative proceedings examined by courts, but in this case the author analyzed procedures and investigations (carried out by an antitrust agency) that were closed at the administrative level. Using a statistical model of decisions issued by the US antitrust department between 1940 and 1994, the research concluded that regional courts, whose rulings vary more intensely, creating legal uncertainty, significantly reduced the willingness of the agency to seek judicial prosecution.

Transaction costs and cost-benefit analysis

One study analyzed the interaction between the judiciary and regulatory policy from the perspective of transaction costs (Silva & Costa Júnior, 2011). The research left aside negative evaluations of judicial intervention and was based on the understanding that such approaches neglect the heterogeneity of preferences in courts. Based on a case study of a rate increase authorized by the Brazilian National Telecommunications Agency and contested in the courts, the authors proposed a model that took into account institutional characteristics of the judiciary and preferences of judges (such as more or less interventionist postures). The paper concluded that the judiciary has internal controls, particularly applied by its higher-ranking bodies, that can complement and reaffirm certain regulatory policies.

Two studies explored institutional design from the point of view of cost-benefit analysis

based on a comparison of regulatory bodies operating in the environmental and financial sectors, in connection with the activities of an agency in charge of supervising federal regulation and judicial review (Revesz, 2016). A specific case is discussed in which, in addition to the friction between regulatory agencies and courts, double reviews (by both the supervising agency and the judiciary) were carried out that had a negative impact on regulation, especially in the financial sector, which is less mature than the environmental sector. The findings of another cost-benefit analysis, covering both regulatory agencies and administrative courts in charge of other functions, identified a cooperative role on the part of courts, suggesting that judicial review is a positive procedure (Gelbach & Marcus, 2017). According to these findings, courts carry out a "problem-oriented oversight" through which dysfunctions in the work of administrative agencies can be mitigated.

2.3 Conclusions and recommendations

The functioning of the regulatory state (Majone, 1994; Levi-faur, 2005) and its impact on public administration require in-depth understanding of the interactions between regulatory agencies and courts. This is an important discussion from the economic and social point of view, since regulatory decisions impact on citizens' daily life, and the topic requires more empirical and systematic research, especially in developing countries (Ginsburg, 2009; Dubash & Morgan, 2012). The discussion presented in this essay shows that although there are many problems with the interactions between the judiciary and regulatory agencies, the academic research agenda has not kept up with the topic in field research. We draw attention to the theoretical complexity of debates on judicial control and to the scarcity of empirical studies on how judicial review of administrative decisions is actually determined, especially from perspectives external to the legal sphere.

As discussed in this essay, the regulatory space is a very useful analytical construct for describing and analyzing the environments in which regulation takes place (Hancher & Moran, 1989; Scott, 2001; Vibert, 2014; Windholz, 2018) and it organizes the discussion beyond the traditional foci on regulatory instruments and techniques. The different organizations dealing with regulation need to address the dispersion of regulatory power in the complex relationships that are marked by conflicting perceptions and preferences (Scott, 2001; Vibert, 2014). In this sense, the following proposition is presented:

- **Proposition 1:** The overlapping of authority in the regulatory space leads to conflicts between legal control by courts and the application of regulatory standards by regulatory agencies.

Complementing the contributions which institutional theory makes to the understanding of the phenomenon, the legal and economic approaches also provide elements for discussing the relationship between regulatory agencies and courts, emphasizing the tensions between technical-administrative and legal rationalities, and the different standards adopted by agencies and courts for interpreting regulatory matters. There is, therefore, a conflict in court decisions about specific cases and the broader character of regulatory objectives and policies (Posner, 2010; Schauer and Zeckhauser, 2010). Consequently, we suggest the following proposition:

- **Proposition 2:** Judicial review of decisions made by regulatory agencies involves conflicts of choice between regulatory and adjudicatory processes and technical-administrative and legal rationalities.

These propositions point to several possibilities for empirical research. Qualitative studies can help to understand how judges perceive their role in regulatory contexts and how these perceptions affect their decisions. Conversely, another important approach would be to examine how technical experts, officials and lawyers of the agencies perceive the consequences of regulatory disputes in their work. As the CNJ study (2011) pointed out, sluggishness and unpredictability in the judicial system significantly affect the work and policies developed by technical experts.

From the perspective of a quantitative approach, this is a timely moment to investigate the factors and constraints that explain judicial deference. Conflicts between technical-administrative and legal rationality can be explored through research into factors and contexts that maximize or minimize divergence in regulatory interpretation in the institutional-legal environment. The review carried out here shows that certain factors can have a decisive impact on how regulatory disputes are addressed by the judiciary. These include institutional characteristics of regulatory agencies and courts and sectoral or thematic variations in regulation.

The main themes emerging from the discussion of the state of the art above, may suggest self-restraint or greater prominence on the part of courts, so it is necessary to check and refine the influence of these and other variables in the Brazilian context. Such research can be based on documentary analysis of cases brought before Brazilian federal courts involving regulatory

agencies. The results of such research can be used to build a database and construct statistical models that may generate possible predictors of judicial deference in the Brazilian context or, on the other hand, lead the judiciary to play a more prominent role in the context of regulation. A content analysis of these judicial decisions, with the support of text mining techniques, could also be important for studying factors that influence judicial decisions involving regulatory matters in Brazil.

3 JUDICIAL REVIEW OF REGULATORY MATTERS: DIVERGENCES AND BOUNDARIES BETWEEN COURTS AND REGULATORY AGENCIES

Abstract

This paper explores the relationships between the judiciary and regulatory agencies in relation to judicial review of regulatory matters. Judicial oversight of the decisions of independent regulatory agencies is quite common worldwide, but few studies have examined the role of courts outside US and European regulatory settings. The main theoretical frameworks for the study were regulatory space and institutional logics. 21 interviews were undertaken with law-and-courts professionals and officials of Brazilian regulatory agencies and the transcripts were subjected to textual analysis. The findings indicate that judicial review of regulatory decision-making involves a fluid interpretation work by these professionals, as well as overlapping roles in defining the way regulatory functions should be organized. The attorneys of regulatory bodies perform a key role in the dialogue between regulators and judges, especially by bridging the gap between technical and legal protocols. The results also suggest that a strict legalistic approach by courts is slowly being replaced by a more pragmatic approach that is more open to weighing non-legal arguments and evidence-based knowledge.

Keywords: regulatory agencies, regulation, courts, judicial review, judicialization.

3.1 Introduction

Regulatory agencies have proliferated around the world, emerging as an institutional expression of state adaptation to the age of governance (Jordana et al., 2011). A huge literature discusses the impact on modern democracy as well as the design and institutional characteristics of these bodies (Baldwin et al., 2010; Jordana et al., 2018). Much less attention, however, has been devoted to the relationship between regulatory agencies and courts, even though this is an important backdrop to a broader understanding of regulatory governance (Levi-Faur, 2011). Outside North America and Western Europe there is even less knowledge about how the judiciary and regulatory agencies interact and the role of courts in regulatory politics (Dubash & Morgan, 2012; Mejia 2020).

The centrality of law to the field of regulation has not been challenged (Cohn, 2011), but the debate over its proper role remains open. Through judicial review of regulatory decisions, courts and regulatory agencies are often called upon to resolve issues involving complex scientific and technical evidence (Vibert, 2014). The choice of an institution to achieve specific goals determines the range of possible legal and public policy outcomes, with far-reaching

implications for regulatory governance. Although the process takes different forms in different domestic legal systems, most liberal democracies seem open to the further development of judicial review of regulatory quality and instruments (Mak, 2012). The increased discretionary power of regulators may be also subject to stricter review at different levels and subjected to distinct legal reasoning.

Some scholars have questioned judicial deference to administrators' expertise, arguing that there is evidence that judges are increasingly engaging in a more active oversight of agencies (Osorio & O'Leary, 2017). There is little knowledge about how judges perceive their work and attitudes to judging regulatory cases. This is an important subject for understanding the regulatory agencies' dialogue with courts in regulatory litigation. The accounts of the attorneys of agencies are also important in understanding the broader panorama of regulation. In this sense, this research explores the relationships between the judiciary and regulatory agencies in relation to judicial review of regulatory matters.

The application of rules by actors with different bureaucratic and organizational ethos, as is the case of regulatory agencies and courts, can lead to conflict in decision-making (Black, 1997). Regulatory agencies and the replacement of the Weberian bureaucratic model by a new regulatory model highlights the importance of discussing how regulocracy and its regulocrats (Levi-faur, 2011) are perceived in the logic of law and accounts of legal actors in regulatory governance. It is important to analyze key players' perceptions and the messages they convey regarding the judicialization of regulatory decisions.

Institutional theory guides the present research. Divergent interpretations of organizational missions are more likely when an organizational field is characterized by multiple institutional logics, each institutionalized to some degree (DiMaggio, 1988; Stryker, 2000). We also employ the concept of regulatory space, a conceptual approach built by organizations, people and events acting together and negotiating boundaries in a specific set of regulatory issues subject to public decisions (Hancher & Moran, 1989; Scott, 2001; Vibert, 2014; Windholz, 2018), because it is difficult to fully understand the role of mutual influences from the perspective of the courts or regulators alone.

This study contributes to the understanding of the impact of judicial review in regulation from the point of view of those directly involved in legal challenges to regulators' actions. The perspectives differ because the actors are professionals trained and socialized according to distinct norms and values (Stryker, 2000; Magill & Vermeule, 2011). It is important to hear what judges have to say, but interviews with officials and attorneys also provide valuable

insights into the operationalization of judicial review in the routine work of the regulatory bureaucracy. Very little research has reflected the role that lawyers play in regulatory litigation and politics (Schmidt, 2004; Hume, 2009; Magill & Vermeule, 2011). This paper sheds light on how law-and-courts and agencies actors spot potential challenges, how they handle litigation, how legal and technical-scientific rationalities interact and what meanings are given to the judicialization of regulatory decision-making.

This paper contributes to the study of regulation by examining regulatory governance from the perspective of the developing world. The redistributive character of regulatory politics in countries that have recently institutionalized regulatory agencies draws in other actors such as courts, since regulation is too important to be left to the regulators (Dubash & Morgan, 2012). The Brazilian experience in regulatory litigation is a suitable case since it is unclear whether a regulatory body's rules could be subject to a substantive (as opposed to procedural) judicial review (Carvalho *et al.*, 2020). Judiciaries in the southern hemisphere perform roles that are not usually seen in developed nations, to meet the specific challenges they face in regulatory settings. It is important to illuminate the unconventional supporting or challenging roles of judges towards regulatory institutions, which are still under development.

3.2 Theoretical background

The interaction between regulatory agencies and courts is conflict-prone because it involves a relationship between different systems of authority and it raises questions about how those systems overlap and adapt to each other (Vibert, 2014). After the widespread diffusion of the regulatory agencification process (Christensen & Lægreid, 2006; Jordana *et al.*, 2011), there is increased awareness that regulatory bodies have the expertise and procedures that fit them to assess evidence and resolve disputes better than the law courts. But at the same time that regulatory agencies emerge as distinct professional and administrative entities and influence bureaucratic behavior (Levi-faur, 2011), they are also constrained by the courts when they attempt to penetrate other systems (Richardson, 2004).

According to principal-agent theory, there may be delegation and agency-related problems when courts and agencies address situations that are not explicitly covered in the law and have to adjust regulatory policy, introducing new interpretations and establishing cause-and-effect relationships at technical levels. But the principal-agent approach fails to include several actors in addition to the other main principal (the Legislative and the Executive

branches), such as the regulated entities, co-regulators and audit courts, the media and judicial courts themselves (Maggetti & Papadopoulos, 2016). The presence of several actors means that the agent (regulatory agency) needs to be concerned not only with its principal within a vertical relationship, but also with other horizontally situated actors. According to Mantzari and Vantaggiato (2020), if principal-agent theory is traditionally used to explain the act of delegation, post-delegation relationships and third institutional actors (e.g., courts) would continue to exert influence on agencies and put in place institutional constraints to tame their discretion.

The theoretical premise of this research is that regulatory agencies operate in a multifaceted environment and that institutional perspectives can explain how they work. Institutional theory can deepen the study of conflicts about institutional logics, because it emphasizes the cognitive impact of institutions and rejects the strictly functional view of regulatory bodies based on rational approaches (Christensen & Lægreid, 2006). Institutional isomorphism, for example, can explain the diffusion process of the regulatory agency model in several countries in the 1990s (Gilardi, 2004; Christensen & Lægreid, 2006). Institutionalism is an important theoretical framework for socio-legal understanding of legal decisions and it may be adopted for the interpretation of the role of law and in decision-making and regulatory processes (Black, 1997).

The institutionalization process of regulation through independent regulatory agencies makes them “taken for granted” as a new legitimate actor and as the most appropriate organizational form for the exercise of regulatory functions (Gilardi, 2004; Stryker, 1994). Regulatory bodies are institutionalized as part of a framework for the regulation of markets and as a general recipe for organizing regulatory bodies in an efficient manner. However, in judicial review of regulatory decisions the judiciary plays an important role in defining the formats and limits of regulation, as well as in shaping actors’ behaviors (Friedman, 1985; Windholz, 2018).

The regulatory agencies’ taken-for-grantedness can be challenged when actors operate in the same arena in which two or more institutional logics present themselves to provide behavioral or interpretative “scripts” for acts, authorities and organizations (Stryker, 1994). Courts and regulatory agencies provide law enforcement and the organizational field in which law enforcement organizations operate is society wide (Stryker, 2000). Regulatory bodies are part of an institutionalization process marked by “technocratization” which captures a complex, multidimensional process by which legal reasoning and law enforcement organizations incorporate scientific-technical reasoning and organizational forms (Stryker, 1994).

The institutionalist approach suggests that close attention should be paid to the cognitive structures of decision makers, especially regarding their understanding and perceptions of their environment and of the decision situations (Black, 1997). Judges and lawyers are carriers of a formal-legal logic related to the interpretation and application of legal rules. The conflict between expertise and legalism would therefore be marked by background tensions between technocratic and legalistic orientations (Magill & Vermeule, 2011).

When an organizational field is characterized by multiple institutional logics, any increase in institutionalization of one institutional logic will simultaneously mean decreased institutionalization (deinstitutionalization) of the other (DiMaggio, 1988). The introduction of a technical-scientific logic to the legal system will deinstitutionalize strict formal-legal rationality in the assessment of regulatory matters. Formal-legal and scientific-technical rationalities are alternatives with potentially competing rule-resource sets to which actors in law enforcement organizations can be oriented. Such a mixed scenario would favor inter-organizational conflicts with actors mobilizing legal and scientific-technical logics as resources to try to define their organizational field (Stryker, 1994, 2000).

The regulatory space is a useful analytic construct for the analysis of regulatory environments and has been adopted by scholars in political science, sociology, law and organization theory (Hancher & Moran, 1989; Scott, 2001; Vibert, 2014). According to Hancher and Moran (1989), the scope of regulation is best understood from the characteristics of organizations that operate in the regulatory space and the cultural environment in which they work. Regulatory space emphasizes that regulatory issues and actors are embedded in existing systems, institutional dynamics and ideational constructs that influence how issues are identified and defined (Windholz, 2018). Regarding state bodies, formal authority is commonly split between the executive, regulatory agencies and courts and this plurality of players often involves competitive behavior to exert power and influence (Scott, 2001).

Regulatory power tends to be dispersed because key resources such as information and institutional credibility that confer it are also fragmented. The overlapping of systems of authority puts regulatory bodies in tension with other state bodies whose regulatory interests are diluted by other objectives, as is the case of the courts, which ends up limiting the discretion of the administrative authorities regarding definitions, interpretations and application of regulatory standards (Scott, 2001; Vibert, 2014). The issue of the role of the law in relation to the regulatory space revolves around the blurred nature of the boundaries between formal-legal versus technical-scientific rationales. In the absence of precise criteria for understanding where

one is mobilized rather than the other, the judicial review of regulatory decisions is a key research subject for understanding how conflicts in regulatory space are handled by important players.

Regulatory space brings together the politics of individuals, organizations and culture in the development of regulatory policy (Schmidt, 2005). It shares features in common with networks (regulatory interactions in continuing patterns) but law and regulatory policy-making reflexively inform each other by shaping the development of practices and organizational habits. For example, professional cultures and turnover within the UK's telecommunications regulator helps to explain patterns of decision-making within the regulatory agency and the institutional conflicts that arise in regulatory space (Hall et al., 2000; Schmidt, 2005).

Cultural issues about the role of law in regulation are particularly important because they can have a decisive impact on how regulatory processes end up in the courts. In the regulatory space, the capacity of actors to adopt passive or active responses is contingent on the resources they can employ as part of their efforts to influence the establishment and interpretation of proposed regulatory rules and associated regulatory boundaries (Hancher & Moran, 1989; Canning & O'Dwyer, 2013). A recent study suggests that regulators use their expertise differently depending on the regulated sector and the level of conflict and uncertainty it triggers in the policy environment (Mantzari & Vantaggiato, 2020).

As formal-legal authority is a core resource available to the courts, judges may engage in an extensive control of the regulatory activity thereby reducing discretion available to regulators. This pattern goes against that of responsive law (Nonet & Selznick, 2017), which would produce fewer tensions between courts and regulatory agencies based on more openness to flexible and adaptive rule-making and wider granting of discretion to regulatory bodies.

As factors determining the shape of a given regulatory domain are complex and challenging for empirical studies (Black, 2001), Vibert (2014) recommends that relationships in the regulatory space should be analyzed at a "meso" level because research is more feasible in certain types of relationships, including those related to regulatory agencies and courts in the activity of judicial review.

3.3 Method

As qualitative approaches are ideal for revealing regulatory cultures and individual and community-level responses and social actions (Losoncz, 2017), this study builds on semi-structured interviews with 21 Brazilian professionals who have experience working, following-up or judging regulatory litigation cases in Brazil. The interviewees fall into three subgroups: eight officials from six federal regulatory agencies, seven attorneys from five agencies, and six federal judges from courts that play a prominent role in regulatory judicial review.

The Brazilian case is suitable for the present research since the regulatory reform which started in the 1990s has been accompanied by a regulatory litigation that is characterized by dysfunctionalities such as slow proceedings and legal uncertainty (CNJ, 2011; Carvalho, Rondon & Marques, 2020). By November 2020 Brazil had 11 federal agencies in charge of overseeing several regulated sectors and all regulatory bodies have been staffed with relevant regulatory expertise through a specific public career that brought qualified professionals of different knowledge fields into their ranks (Freire et al., 2017).

The officials were drawn from professionals with different profiles in different regulatory agencies. Attorneys were included because of their role in handling litigation before courts and their daily exposure to technical and legal rationalities and the need to reconcile them. These two groups of interviewees work at seven agencies: National Agency for Petroleum, Natural Gas and Biofuels, National Electricity Agency, National Telecommunications Agency, National Civil Aviation Agency, National Agency for Land Transportation, National Sanitary Surveillance Agency and Administrative Council for Economic Defense. Participants received an invitation letter as well as snowball technique was also employed (subsequent interview subjects are invited based on the recommendations of previous interviewees).

The third group were judges from two federal courts that play a prominent role in regulatory litigation in Brazil: the Regional Federal Court of the 1st Region (TRF1), which is headquartered in Brasilia, the federal capital, where many regulatory lawsuits are filed; and the Regional Federal Court of the 3rd Region (TRF3) which is headquartered in São Paulo, which is prone to receive high profile regulatory cases because of the big firms and industries located in the richest Brazilian State. One judge (Justice) of Superior Court of Justice (STJ), the apex court for federal law issues in Brazil, was also interviewed. In relation to the judges, three gave a positive feedback in relation to an invitation letter and three were approached by snowball technique.

All 21 interviews were undertaken between April and July 2020 using video conferencing platforms, due to the Covid-19 pandemic. The semi-structured interviews (see interview script in Appendix 1) were individual, recorded in audio and transcribed. They lasted an average of 40 minutes (the shortest took 25 minutes and the longest took 92 minutes). After the 18th interview, the answers sounded repetitive. Three more interviews were carried out, one in each group, for confirmation of the saturation point, when no relevant information was added in relation to the previous participants. The interviewees' data are shown on Table 2.

Table 2 – Interviewees data

OFFICIALS ¹				
Code	Agency	Position	Gender	Experience with regulation
(O1)	Agency 1	Manager for regulatory policies (Background in Law)	Male	6 years
(O2)	Agency 1	Advisor (Background in Law)	Male	6.5 years
(O3)	Agency 2	General Manager (Background in Chemistry)	Female	13 years
(O4)	Agency 3	Advisor to the Presidency (Background in Management and Economics)	Male	15 years
(O5)	Agency 4	Advisor for tariffs (Background in Economics)	Female	13 years
(O6)	Agency 4	Advisor for Regulatory Oversight (Background in Management)	Female	18 years
(O7)	Agency 6	Manager for Consumer Relations (Background in Accounting)	Male	13 years
(O8)	Agency 7	Advisor for Infrastructure (Background in Production Engineering)	Male	12 years
ATTORNEYS ²				
(A1)	Agency 1	Deputy Attorney General	Male	1.5 year
(A2)	Agency 2	Attorney General	Female	5 years
(A3)	Agency 2	Advisor to the Attorney-General	Female	5 years
(A4)	Agency 3	Deputy Attorney- General	Male	7 years
(A5)	Agency 3	Coordinator for judicial litigation	Female	8 years
(A6)	Agency 4	Attorney General	Male	9 years
(A7)	Agency 5	Deputy Attorney General	Male	6 years
JUDGES				Years on bench
(J1)	TRF1 (Court 1)	Federal Judge	Male	17 years
(J2)	TRF1 (Court 1)	Federal Judge	Female	9 years
(J3)	TRF3 (Court 2)	Federal Judge	Male	22 years
(J4)	TRF1 (Court 1)	Appeal Judge	Female	27 years
(J5)	TRF1 (Court 1)	Acting Appeal Judge/Federal Judge	Male	8 years
(J6)	STJ (Court 3)	Justice	Male	27 years

Source: research data.

¹ All officials are permanent civil servants and belong to the public career of Expert in Regulation.

² The judicial representation of federal regulatory agencies in Brazil is carried out by members of the career of federal attorney, linked to the Attorney General's Office.

Data analysis used a protocol for performing textual analysis using the IRAMUTEQ 0.7 software (Ratinaud, 2014; Ramos, Lima & Amaral-Rosa, 2019). Descending Hierarchical Classification and Factorial Correspondence Analysis were carried out. IRAMUTEQ performs a subdivision of the corpus that allows the creation of lexical classes similar to each other and different from others. It is, therefore, an appropriate tool for analyzing textual content, since it can create a synthesis of the discourse, with its main axes and themes. Additionally, content analysis was undertaken upon the speech of the interviewees.

3.4 Results and Discussion

3.4.1 Descending Hierarchical Classification and Factorial Correspondence Analysis

Before carrying out the analyses in the software, a corpus was built composed of the texts of the 21 interviews in a single file. We also recorded descriptive variables, including the interviewee number, organization, position and level of jurisdiction. Once the transcribed material was imported into IRAMUTEQ, a global analysis corpus was made of 1170 text segments with use by the software of 91.17% of the corpus. The total lexicon set has 63,237 words, including 6,118 different words and 2,986 words that occurred only once. A descending hierarchical classification was generated for the corpus in analysis with the four stable classes that emerged (see Fig. 1). Two branches are evident: (i) Branch 1 (B1), with two classes, Class 1 (24% of the corpus) and Class 2 (32.7%); and (ii) Branch 2 (B2), with Classes 3 (16.5%) and 4 (26.8%). That means that Classes 1 and 3 have less relation or proximity to Classes 2 and 4.

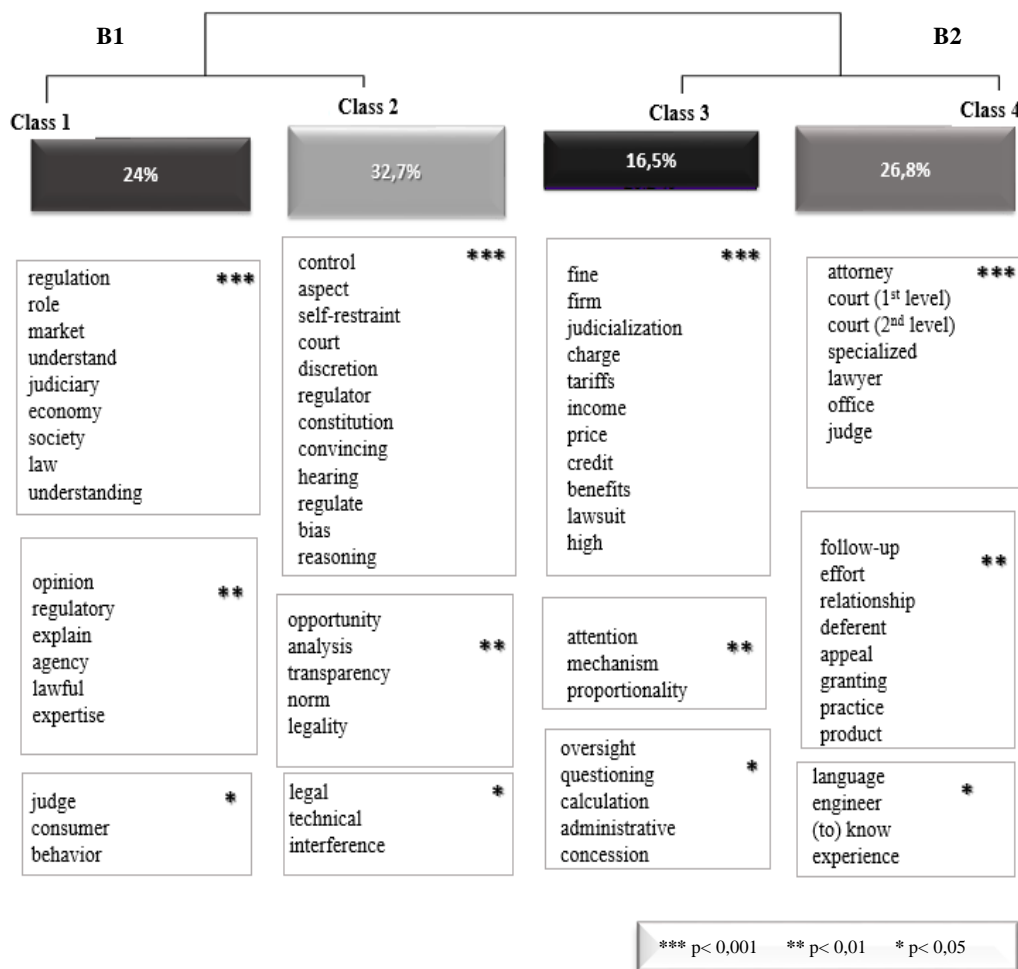


Figure 1 – Descending hierarchical classification (dendrogram) and their respective most significant words

IRAMUTEQ's cluster method of lexical classes was also chosen because it shows the distribution of words associated with important areas of textual content. Reinert's analysis synthesizes the textual information and classifies the most important by means of statistics, such as the calculation of the χ^2 , and classifies simple statements of the text according to the distribution of the words, identifying the most characteristic words of a text. Less important lexical expressions (e.g., prepositions, articles, pronouns) were removed by the software and the words with $\chi^2 \geq 3.84$ ($p\text{-value} \leq 0.05$) are highlighted (see Figure 1).

We also performed a Factorial Correspondence Analysis which shows in a more dynamic manner the most important relationships between the variables and subjects in a factor plan. The four classes are split into four quadrants of the cartesian plan and there is a clear opposition between Classes 1 and 3, and 2 and 4 (Figure 2, upper image). These oppositions should be understood as differences in focus within the corpus as each class covers specific semantic contexts, regarding the semantic root of the word that most interfered in the class.

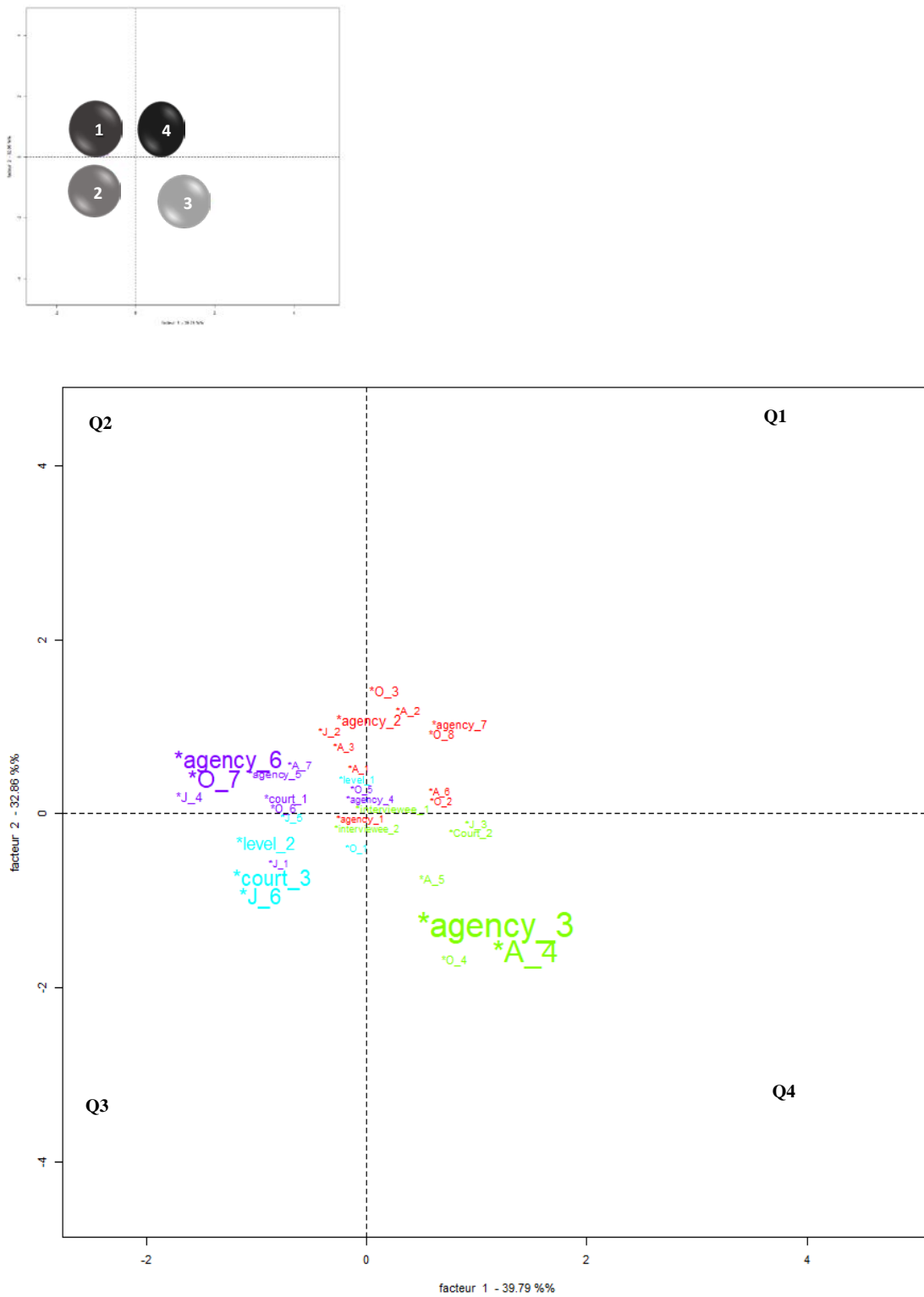


Figure 2 – Factorial Correspondence Analysis classes (upper image) and subjects and organizations

Class 1 – Understanding of regulation, contains mostly words related to the interviewees’ broad understanding of regulation and respective roles of courts and regulatory agencies. The most frequent lexical forms relate to “regulation”, “role”, “understanding”, “expertise”, “judge”

and “behavior”. However, the words are associated to quite different individual perceptions in relation to the nature of regulation and the role of regulatory bodies and courts depending on the interviewee, varying from defenses of a balanced judicial intervention to those who advocate a sharp division of functions between regulators and courts. Most of the professionals from regulatory agencies and courts see a reciprocal misunderstanding of their roles. Quadrant 2 is the one with the greatest diversity of subjects and organizations, namely: agencies 4, 5 and 6; officials O6 and O7; attorneys A1, A3 and A7; judges J2 and J4; and court C1.

Class 2 – Judicial control of regulation, is the most representative class (32.7% of the corpus) and its main occurrences are “control”, “self-restraint”, “court”, “discretion”, “reasoning”, “norm”, “legality” and “interference”. The words are related to a more balanced view upon the relationship between courts and regulatory agencies and allude to more cautious judicial interventions in regulatory matters as long as the regulators provide a good basis for their decisions. Interestingly, Quadrant 3 is composed almost exclusively by judges (J1, J5 and J6) and is associated to court C3 and to the second level of jurisdiction (appeal level).

Class 3 – Judicialization of fines, contains lexical forms linked to the routine of industries that disagree with regulatory agencies’ fines and seek relief through judicial review of those enforcement acts. The most frequent words are “fines”, “judicialization”, “oversight” and “questioning”. The words are linked to the context of dysfunctional litigation that allows enterprises to obtain a reinterpretation of the regulatory rules in their own interests. Regulated agents seek to escape or postpone monetary sanctions by obtaining legal injunctions that dilute regulators’ power of enforcement. Quadrant 4 is predominantly characterized by views from attorneys A4 and A5 and official O4, all of whom belong to Agency 3 (from the infrastructure sector).

Class 4 – Role of agencies’ attorneys: the most frequent occurrences are “attorney” (agencies’ attorney), “courts” (1st and 2nd level), “judge”, “follow-up”, “relationship” and “language”. The words are associated with the key role of regulatory agency attorneys in the relationship between regulators and courts. Several interviewees highlighted the challenge for these professionals in bridging the gap between the regulators’ technical areas and the handling of disputes before the courts, especially in “translating” regulatory decisions and technical choices into legal language, as well as in keeping an effective dialogue with courts. Quadrant 1 shows a homogenous discourse among officials (O2, O3 and O8), attorneys (A2, A3 and A6) and agencies (2 and 7).

The distribution of the classes in the factorial plan reveals a complex interplay of different perceptions highlighting the specifics of regulatory litigation. There are difficulties in reconciling distinct logics on the part of regulatory bodies and courts, as well as distinct professional attitudes and an absence of a common understanding of how regulation carried out by those institutions and players could work properly.

3.4.2 Interviews: general overview

Most of the officials oppose regulatory judicialization, as might be expected. A perception prevails that regulators hold an advantage over courts in gathering regulatory expertise and the judiciary should act with extreme caution and self-restraint in the judicial review of decisions of regulatory agencies. Most officials interviewed defended the rigor and quality of decisions in the technical sphere, and argued that judicial scrutiny, when it goes beyond procedural-legal considerations, often disrupts regulatory frameworks, and long-term policies in particular. Some interviewees (O1, O5, O7, O8) pointed out that it is hard for the judiciary to understand the polycentric character of regulatory policies and, based on these misunderstandings, often produces wrong decisions. They warn that the courts end up being an arena where agents can use economic power to delay the enforcement of sanctions by litigating against regulatory bodies. When asked about the positive aspects of the courts' decisions, most officials acknowledged that the judiciary may require more transparency in the agencies' procedures and recognize that courts have provided important inputs that promote transparency.

The attorneys of the regulatory agencies made similar comments to those made by the officials, but these professionals generally had a more nuanced interpretation of the judicial review of regulatory acts. For example, some of them expressed personal views about the different degrees of institutional maturity of the regulatory body to which they are linked and emphasized its impact in judicial litigation. Attorneys A2, A3, A4 and A5 highlighted what they consider a higher level of judicial deference, which they attribute in part to the close dialogue between the attorneys and the technical areas in Agencies 2 and 3. These professionals emphasized the need for a prior hearing of the regulatory agency in cases of preliminary injunctions and a predisposition on the part of the judiciary to review higher value fines imposed by the regulator. Attorneys A1 and A6 expressed a very negative view of judicial review, which they described as erratic and widely used by powerful economic agents dissatisfied with regulatory decisions contrary to their interests. Attorney A1 acknowledged that his regulatory agency had been very exposed to political appointees to its board in the past, but that the

organization has made progress in adopting more technical criteria and in substantiating its decisions in recent years. Attorney A6 acknowledged that the performance of the agencies' attorneys could be improved, and that they could engage in a better dialogue with the courts.

Judges J1 and J6 presented a strong defense of greater judicial self-restraint in relation to the regulatory agencies and believed that there must be judicial control in very limited and specific situations. Judge J6 (an STJ justice and a former federal and appeal judge) pointed out that as judges mature professionally and move to appeal courts, they have more opportunity to achieve balance in regulated economic sectors, but first level judges frequently prefer to privilege other aspects in their decisions. Judge J3, for example, recognized that he had made several decisions based on consumer protection, which in his view is often overlooked by regulatory bodies. Judge J5 and Judge J2 recognized the specifics and complexity of regulatory lawsuits and the need for quicker solutions on those issues, but also pointed out that the judiciary cannot refrain from intervening in the defense of fundamental rights. Judge J4 defended a less interventionist approach in regulatory issues, but, in her view, some regulatory agencies still need to prioritize better organization of their legal departments, in order to produce more solid and convincing legal defenses and prepare better for court hearings.

3.4.3 Discussion of main findings

The analysis of the interviews shows an intricate relationship among the different players in the regulatory space, characterized by boundary issues where systems overlap and must adapt to each other (Vibert, 2014). This overlapping creates a situation where there is considerable potential for regulatory decision-making and judicial rulings to diverge, resulting in tension and potential conflict between legal and non-legal norms. Most of judges and officials interviewed resented the absence of clear lines in the assessment of litigation in the regulatory field. The individual definition of criteria regarding self-restraint or judicial intervention was even assessed by one judge interviewed as “painful”, and according to her:

In injunction procedures the judge has very short time limits for deciding and there is a lot of information asymmetry in relation to very complex regulatory policies. I think we would need to understand a little more what the agencies do, improve our decision-making mechanisms so that they are less invasive and have a little more confidence in the administration's work. [But] We don't have that. We end up being a little too interventionist (...) but the judiciary has been part of improving our democratic culture and I think our participation is important. (J2)

This quotation sheds light on the role of law which, from the institutionalist perspective operates at direct and less tangible levels (Black, 1997). At the more direct level of the juridification of the regulatory process, by the introduction of legal rules, legal actors and

litigation. And at the less tangible level, but no less significant, it affects expectations of the form and operation of a regulatory or decision-making process. Most judges interviewed (J2, J3, J5, J6) justified court interventions because of the risk that regulators may be captured by private interests or that consumer issues come to the judiciary because they were previously handled poorly by regulatory agencies. But a broader understanding of the counter majoritarian role of courts and the constitutional mandate for judicial review were also raised by most of the court interviewees. Even in contexts where regulation creates new legal relationships and societal organization, the law plays a significant role that goes beyond defining specific legal rights.

Indeed, Class 1 – Understanding of regulation, enters different accounts of regulation and the role of stakeholders. One judge (J5) acknowledged that key players think about regulation in very different ways and this situation alienates international investors and market agents. For some officials, despite the shadow of judicial control over their tasks, legal values seemed somewhat distant and unnecessary. Although their procedures have legal rationality, they believe that their actions are mainly designed to satisfy the demands of administrative efficiency. One of the officials stated:

You make a technical norm to solve a problem and there you have to be impartial between government, agents and consumers. The judiciary thinks about fairness. But we make another thought, because we must solve an issue in the best possible way, cheaper, simpler and with lower transaction costs. (O5)

All officials interviewed more or less agreed with the above point of view, possibly because the agencification process has been accompanied by the infusion of a strong sense of mission and accomplishment in developing logical and efficient regulatory solutions (Christensen & Lægreid, 2006). But one official recognized that, as regulatory agencies sometimes need to go beyond open-ended legislative norms, a delicate balance between legal and technical aspects must be found, as this quotation shows:

In some technical aspects the legislation sometimes does not fully support our work, but we have technical protocols to follow. Last year, we published a new regulatory framework trying to bring more clarity in this matter, so now we have a little better guidance on how to work on these aspects. But it's really complicated. (O3)

As principles such as court judgements based on fairness are received and interpreted in administrative systems among several other factors and pressures, agencies may receive court decisions requiring changes in policies and procedures with hostility (Sunkin, 2004). Such reactions may also be affected less by the substance of judicial ruling and more by the inconvenience of implementing the decision (Hertogh & Halliday, 2004; Hume; 2009). The following quotation illustrates this view:

The regulatory activity is very specific, it involves circumstances and consequences that are not achieved by judicial control. If I have to modulate a regulatory public policy in court, I cannot predict what the practical effects are. That is, good intent can backfire, and it usually happens. (A7)

In analyzing the tensions between law and technical expertise it is important to focus on the internal composition of agencies. The more power the courts have to override agency choices on legal grounds, the greater the role within agencies of lawyers (Magill & Vermeule, 2011). Agency attorneys emerged as a central word in Class 4 – The role of regulatory agencies’ attorneys. The cordial relationship between attorneys and judges and their good knowledge of administrative law were highlighted by several interviewees, but some criticisms were made of a possible separation from private lawyers in maintaining a clear dialogue with judges. Two attorneys agreed with that criticism but said that their job was more challenging than the private lawyers’ because they often have to “deconstruct” regulated parties’ version of the facts that is normally presented to the judge first. When agencies’ attorneys fail to provide the best reading of regulatory norms and open-ended statutes, regulatory policies can be undermined (Sunkin, 2004). The key role of attorneys in handling litigation is critical to the process by which regulatory meanings are given to courts. This has been identified by previous studies of this group of professionals in empirical studies of judicial review of administrative and regulatory subjects (Schmidt, 2005; Hume, 2009).

The word “fine” is the central word of Class 3 – Judicialization of fines. This can be seen as a clear judicial intervention in an important pillar of regulatory agencies’ enforcement. In fact, regulated agents may initiate legal action against regulators if they perceive their decisions as damaging to their interests (Mantzari & Vantaggiato, 2020). Despite a recent move toward modern regulatory techniques (e.g., those related to responsive regulation), some interviewees acknowledged that their bodies are largely dependent on fines for effective compliance. Attorneys A4, A5 and official O4 criticized regulated agents for seeking to ‘over-judicialize’ administrative procedures. Those professionals highlighted that big regulated companies take advantage of their robust legal departments (or prestigious law firms) in order to avoid complying with monetary penalties and this behavior ends up weakening the pedagogical aspect of regulation. Attorney A4 considers that judges often defer to his agency on technical issues, but that courts often associate fines with the legal principles of tax law and feel more comfortable about intervening. According to him:

There is a lot of litigation related to fines. However much we try to create other mechanisms to regulate other than the fine, mechanisms of deterrence, the fine is always the last option available [...] If there is a high value fine against a large economic agent, the interest in judicialization is clearly greater than if it were in a case where the other party had fewer economic resources. (A4)

Judge J6 had another interpretation of the same subject:

[Agencies] should give incentives in cases regulated agents act within the policies that they want to encourage. I think it is better than these fines, which are often very heavy depending on the segment that is being regulated. So, I think that in a situation like this, you really have to exercise judicial control, bring [fines] to a more reasonable level of sanction, by applying the principle of reasonableness and the principle of proportionality. (J6)

The courts apply legal principles that, according to the regulatory agencies, are inappropriate. Regulatory interactions, especially in the processes of enforcement and compliance, are mediated through the legal practices of interpretation due to the indeterminacy of legal principles and rules (Picciotto, 2017). According to attorney A7, the judicial branch intervenes on a strict legal basis, even though regulation works very differently in a pragmatic, operational and tactical manner, to induce behaviors in the market and society. However, courts work on a rather different regulatory rationale since formal legal institutional logic does not necessarily focus on policy goals (Stryker, 2000).

The words that emerged in Class 2 – Judicial control of regulation – refer to a broader view, mainly from the perspective of judges, regarding a more balanced control related to judicial review. This approach could be interpreted as the emergence of a more fruitful dialogue between regulators and courts and a greater openness of the latter to regulatory standards. For example, continuing relationships between regulatory agencies and courts fill the gaps in regulatory issues unseen by the legislative branch. The emergence of ‘responsive law’, as an evolution from ‘repressive’ and ‘autonomous’ legal orders, and in response to the crisis of legal formalism characteristic of autonomous law, may signal the institutionalization of new and more open forms of social and economic control and coordination (Picciotto, 2017).

Judge J5, who, despite being a first-level judge, has experience in judging cases in the appeals court, believes that new trust relations between regulatory bodies and courts are being developed. According to him:

The Judiciary as much as possible has to seek in these regulatory demands an understanding of the managerial public administration and bring to its functioning the elimination of old-fashioned and unnecessary rites, because of our plural, hyperconnected and post-industrial society. (J5)

However, first level judges J2 and J3 bemoaned the lack of institutionalized channels of dialogue (such as conciliation chambers) and training courses. In relation to the latter, initiatives of interinstitutional forums have been created but in general do not last long (they are not permanent) and are highly dependent on the incumbent leadership. Interviewees pointed out that they have to fund their own training and that they keep in touch with new regulatory forms because of their own personal interest. Judge J2 believes that the legal culture of most of the

judges relates to an “old” administrative law that does not meet the challenges of today’s regulation and that judges would benefit from being trained and informed about modern regulatory practices.

According to Stryker (2000), when there are no signals that a new institutional logic replaces the older one, our expectation can be two-fold: on one hand there may be the creation of a hybrid institutional logic (e.g., technocratization) formed by synthesizing elements of the multiple institutional logics, while on the other hand no ideal-typical logic or set of carriers is clearly dominant or subordinate, so that what has previously been institutionalized is a relatively stable, but there is an uneasy balance between multiple logics and their carriers (Stryker, 2000). In the present study, no clear signals were found that the Brazilian regulatory institutional landscape has moved decisively toward a scientific-technical logic. This is mainly because judges who take part in judicial review are not entirely comfortable with substituting a formal-legal rationality with regulatory purposive reasoning.

Our findings also indicate the importance of a regulatory space approach in studying judicial review of regulatory decisions. It makes clear that players are continuously reacting to multiple constraints and engaging in cooperative and conflicting behaviors (Windholz, 2018). This approach is particularly relevant for analyzing the consolidation of new regulatory bodies that confront judicial institutions in the context of the expansion of the regulatory state in developing countries. The results suggest that, to date, regulatory agencies have relatively failed to engage with local institutional contexts (Dubash & Morgan, 2012). Reflections on regulatory space reflections prompts the thought that, in the exercise of regulation, even state bodies must negotiate boundaries with bodies with which they are interdependent (Scott, 2001).

Technical expertise is a key resource for regulatory agencies in securing power in a regulatory space, and in particular, in their efforts to dominate the interpretation of regulatory obligations (Scott, 2001). Regulatory quality is evidence-based, meaning that better policies are developed on the basis of the best available information about the effectiveness and efficiency of specific regulatory practices (Mak, 2012). But the information on the hands of the regulators and its accompanying power depends on successful translation into legal language to be convincing when regulatory decisions are under scrutiny in the courts. This implies that attorneys will need to work more closely with agencies’ technical departments and think about how best to present cases and more persuasive defenses.

The regulatory space approach implies that regulators must negotiate boundaries to regulation with regulated agents and with other players who might wish to occupy the space

(Hancher & Moran, 1989). Regulated agents, especially the economically powerful, seem to take advantage of unclear boundaries between state regulators, and employ their resources to influence the establishment and interpretation of regulatory rules in their favor, undermining efforts to enforce the decisions of regulators. Economic agents exploit contradictions in the regulatory arena and seek to reshape the regulatory space through interaction with others in the space to reinterpret the rules (Scott, 2001). Agencies develop and implement policies while continually facing the prospect that their actions will be reviewed and may be overturned (Turner, 2017). That promotes a dysfunctional framework in developing countries, where regulatory agencies are institutionalized in a scenario that encourages for early legal challenges to regulatory policies that are usually intended to produce long-term stability and predictability in regulated markets (Ginsburg, 2009).

If the courts do not know how to assess the processes in the regulatory agencies, they will experience problems in exercising control. Judges need to aware that the traditional legalistic and rule-oriented approach to judicial decision-making is inadequate for the judging of regulatory cases (Mak, 2012). The legalistic approach is beginning to be replaced by a more pragmatic one which is gaining more support and takes into account of the functioning of the law in a broader societal context. Responsive law and purposive regulation presume a far broader and inclusive conception of the legal process. Responsive law is a problem-solving, facilitative enterprise that can bring to bear a variety of powers and mobilize an array of intellectual and organizational resources (Nonet & Selznick, 2017).

3.5 Conclusion

The study of judicial review on regulatory matters reveals a complex relationship. It is important to investigate how judicial review influences bureaucratic organization, practices and attitudes, and the reciprocal influence on courts. In addition, the discussion of who makes decisions in the context of the regulatory space highlights the importance of the choices made by actors with power and authority, including regulators and courts. Key state actors and their actions give meaning to important interactions that define the regulatory state. By examining the divergences and boundaries among key players in regulatory judicialization, an important contribution is made to our knowledge of the development of regulatory governance outside the contexts of North America and Western Europe.

To frame our study, we used the concept of regulatory space in conjunction with

institutional logics related to the distinct rationales of regulatory frameworks. Those theoretical lenses made it possible to understand how the judicial branch, accustomed to the formal authority to overrule agency decisions, exercises an important ex-post control in relation to the delegation of regulatory power to independent bodies. This subverts the taken-for-grantedness that regulatory authorities seemed to enjoy in the regulatory state. Courts perform a role that seems to transcend legal or accountability oversight, and sometimes create a burdensome check on regulators' discretion, so that regulatory outcomes are less clear.

The analysis demonstrates that, when regulatory decision-making is exposed to judicial review, fluid interpretations produce latent conflicts between the key professionals involved, and overlapping authorities compete to define how regulatory functions should be organized. Different expectations were in the background for accounts offered by judges, officials and attorneys, and they have an important impact on how the regulatory system operates and on the way in which rules are made and reviewed.

When different players disagree because they perform overlapping roles, cooperation is difficult and the task of balancing the contrasting views and perceptions is made harder. One important finding was that the attorneys of regulatory agencies have a key role in the process by which regulatory meanings are presented to courts. The results show that they play a subtle but important role in bridging the gap between the technical and legal languages and protocols and are able to offer a nuanced appreciation of the way judicial decisions are received and understood by regulatory bodies.

However, continuing interactions between regulatory bodies and courts are also beginning to change the culture and relationships between agencies and courts. Despite some reluctance, most of the officials recognize that the involvement of courts may improve transparency and procedural aspects in their decision-making. At the same time, judges have a greater awareness of the specifics of regulatory policy and of their own weaknesses in assessing decisions in highly technical areas. The results suggest that a legalistic approach is slowly being replaced by a more pragmatic approach, which is more open to the weighing evidence-based knowledge that is not subject to strictly legal arguments. That shift depends on a more fluid communication between courts and regulatory agencies and the institutionalization of permanent channels of dialogue.

Regarding the limitations of this present study, further research could include the collation of perceptions of private lawyers, who produce the defense of regulated companies, as well as managers of corporations that experience judicial litigation on regulatory matters. Those players

would probably have a more nuanced view of regulatory litigation, as they seem well placed to understand, and once take advantage of, conflicting views of courts and regulators. Other state bodies that make up the regulatory space could also be included in future studies. For example, audit courts also interact with regulatory bodies, and several interviewees raised concerns about their increasing involvement. A stricter scrutiny of national audit bodies in relation to regulatory decisions could reveal implications for regulatory governance as far reaching as those generated by judicial review. Their role as co-regulators must be a focus in future research.

4 FACTORS AFFECTING JUDICIAL DECISIONS ON REGULATORY MATTERS

Abstract

The research explores factors affecting judicial decisions on regulatory matters. Information from 1,353 judicial review appeals against decisions issued by nine Brazilian regulatory agencies, judged by two federal appeal courts in the period from 2010 to 2019, were analyzed. Data analysis used a logistic regression with decision ruling in favor or against the agency as dependent variable and as independent variables the following: length of the proceedings, regulatory agency, subject of the decision, grounds of the court ruling, court and the amount in dispute. The results show that the length of the proceedings had a huge impact on the court behavior. The findings also suggest that courts are more likely to issue rulings against the regulatory authorities when reviewing legal-procedural issues and on subjects involving norms and price-setting regulatory tasks. The electricity authority was the only regulatory body that had results statistically significant and it was found that appeal rulings were more likely to be against that organ.

Key words: regulatory matters, judicial decisions, regulatory agencies, courts

4.1 Introduction

The relationship between the judiciary and the public administration has undergone important changes in the context of the regulatory state (Majone, 1994; Levi-Faur, 2005) and understanding how courts and regulatory agencies interact is necessary since several aspects of this relationship remain underexplored (Deller & Vantaggiato, 2015; Osorio & O’Leary, 2017; Bell, 2019). Law is an essential part of the regulatory state’s apparatus, and constitutes regulatory authorities and their modes of functioning, establishing contractual arrangements, and adjusting relationships between enterprises, citizens, consumers and courts and other legal institutions, resolving disputes arising from the regulatory process (Kingsbury & Donaldson, 2013). Courts interpret the agencies’ legal mandate that legitimizes their activities, which are also likely to be challenged by some stakeholders (Berg, 2000).

The current legal context of liberal democracies seems open to further development through the judicial review of regulatory quality and instruments (Mak, 2012). Although there have been studies of the relationship between the judicial branch and regulatory agencies (McCubbins, Noll & Weingast, 1987; Tiller & Spiller, 1999; Dragu & Board, 2015), few of them have analyzed the contents of judicial appeals against regulatory decisions outside the context of the United States (Mejia, 2020). Further research is needed especially in developing countries, where the creation of independent regulatory agencies is seen as the best way of

developing expertise and of implementing regulatory policies without political interference (Christensen & Læg Reid, 2006; Prado, 2012).

Studies on how courts operationalize and modulate self-restraint or a more active role when reviewing regulatory matters could make important empirical contributions. Greater cognitive challenges will face the courts, with judges confronted with policy choices and asked to assess, for example: whether decisions issued by a regulatory agency are in accordance with its legal purpose; whether economic inferences are sufficiently robust to support an administrative decision; and address polycentric conflicts involving competitors, suppliers and consumers (Mantzari, 2016).

In Brazil, courts have the power to review administrative and regulatory acts and have revealed several shortcomings. The Brazilian National Justice Council found that sluggishness and unpredictability prevail in the judicial review of regulatory decisions (CNJ, 2011). The problem remains to date, as judicial deference to technical discretion seems to depend on case-by-case basis and the precise scope of judicial review regarding agency rulemaking is still unclear (Carvalho, Rondon & Marques, 2020). For example, complex institutional governance in the electricity sector promote litigation among a wide range of players (Gomes & Poltronieri, 2018) and delicate balances between public and private interests in the health care sector (Aith, 2016) still constitute a challenge for Brazilian courts.

The spread of agencification worldwide provides research opportunities about judicial deference and self-restraint in addition to those that are provided by the US literature (Pierce, 2011). There are still many gaps in empirical research on characteristics of appeal cases that lead to more or less judicial scrutiny of the technical discretion of independent agencies, depending on the policy sector, regulatory task under challenge or type of plaintiff (Mejia, 2020). To fill in this gap, the objective of this paper is to explore factors affecting judicial decisions on regulatory matters. It deals with an empirical analysis of 1,353 regulatory judicial decisions undertaken by two federal appellate courts that play a prominent role in regulatory matters in Brazil, namely, the Regional Federal Court of the 1st Region (TRF1) and the Regional Federal Court of the 3rd Region (TRF3).

The analysis focuses on cases in which the capacities of the agencies were judicially addressed (Jordana, Fernández-i-Marín & Bianculli, 2018). We also included in the database cases where the court focused its deliberation on procedural aspects, since the judicial decision-making process in the field of regulation often focuses on such issues, which courts seem to be more familiar with (Black, 1997; Vibert, 2014). This study also discusses the length of

proceedings, a variable that is not often addressed in the literature (Bajakić & Kos, 2016), and the amount in dispute, about which no empirical studies were found. Such variables deserve special attention, as they may be seen as proxies for the complexity of the proceedings, a particularly important aspect when it comes to issues of regulatory judicial review.

4.2 Theoretical background

Courts are more than just reviewing bodies in regulation, since institutional economics suggests that they play an important role in a country's institutional endowment (Williamson, 2005; Voigt, 2019). Courts may significantly shape the form of regulatory standards even if they do not create them (Popelier, 2012). Judicial review may serve to protect non-majoritarian values, fundamental rights, and general principles of law (Gerardin & Petit, 2012). Judicial review can also promote economic welfare by mitigating the effects of decisional errors and setting of normative standards. An effective appeal process is an error correction mechanism that is a necessary condition for the improvement of efficiency in legal systems, since decisions of higher courts influence lower instances and regulatory bodies (Shavell, 1995; Avadsheva, Golovanova & Katsoulacos, 2019).

The law and economics literature views courts and regulators as alternatives and discusses the merits of each of these institutions (Kessler, 2010; Posner, 2010). The value of each institution is determined by aspects such as (Posner, 2010; Schauer & Zeckhauser, 2010): the distinct merits of technical-administrative and legal rationalities; the different standards adopted by agencies and courts for interpreting regulatory matters; the suitability of ex-ante or ex-post enforcement; the tensions regarding court decisions about specific cases; and the broader character of regulatory objectives and policies.

In view of these different characteristics, scholars have noted that regulations are established on the basis of two imperfect alternatives, and that the virtues and failures of both courts and regulatory agencies should be evaluated (Shleifer, 2010). The importance of courts in the scrutiny of regulatory decisions and providing incentives for state agencies to act efficiently are described in a number of studies (Fisher, Pascual & Wagner, 2015; Gelbach & Marcus, 2018; Avdasheva, Golovanova & Katsoulacos, 2019). The lack of prior commitment of the courts to a given regulatory policy leads to the adoption of a more neutral and balanced approach than that adopted by regulatory bodies, where high-ranking positions are often held by people appointed by politicians (Posner, 2010).

The involvement of general courts in regulation is also contested on the grounds of its consequences: greater judicial control, to the point of impinging on the merits of regulatory public policies (Schmidt, 2005); lack of a broader view of regulatory affairs, as judicial deliberation occurs in isolated cases (Schauer & Zeckhauser, 2010); and courts may lack the information and expertise required to review regulatory decisions because of their complex economic arguments (Baye & Wright, 2011).

Despite the risk of delay and uncertainty of regulatory outcomes, mixed systems with courts and agencies have the advantage of exploring relevant complementarities. In an ideal hybrid system, judges would review the rulings of agencies for compliance with statutes and with principles of fair procedure, on subjects that judges are more familiar with. Mission-oriented administrators may disregard procedural issues which must also receive appropriate weight (Posner, 2010). Such a system would highlight the potential of courts, when reviewing decisions, to overrule decisions that have been made (Helland & Klick, 2012).

Empirical studies have analyzed issues related to efficiency and performance of institutional environments characterized by the coexistence of regulatory agencies and courts. Bajakić and Kos (2016) analyzed litigation brought before courts against decisions of twelve Croatian regulatory agencies from 1995 to 2011, regarding the winning party, percentage of success, costs involved and case duration. Their findings indicated that regulatory agencies have been increasingly successful in confirming the legality of their decisions and a positive correlation between the technical or economic complexity of a regulatory decision and the percentage of court rulings in favor of regulatory agencies. Wright and Diveley (2013) found different results, as their research suggested a high level of judicial annulments in relation to the US Federal Trade Commission, a highly specialized agency.

Law and economics scholars highlight the importance of resource allocation efficiency, but this social goal is connected to law and public policy through institutional choice. The implications for law and public policy can only be addressed through comparative institutional analysis (Fix-Fierro, 2003). Following this line, Komesar (1997) developed a model to compare market performance and the political and the judicial processes and applied it to specific instances of public policy. A more restrained stance by the judiciary would be desirable, highlighting structural and institutional characteristics that significantly, but not fully, restrict its ability to analyze and alter regulatory decisions from a substantive or distributive perspective (Mantzari, 2016).

Judicial review of regulation is related to institutional efficiency and one question that

arises is the extent to which economic or scientific standards can prevail over legal principles in the institutional choice concerning the design of the regulatory process (Mak, 2012). In exploring the determinants of judicial scrutiny of regulatory decisions in the European Union, Geradin & Petit (2012) state that judicial review follows a formalistic approach and legal principles, such as fundamental rights protection, even with regard to complex economic appraisals. The traditional legalistic, rule-oriented approach to judicial decision-making, which prevails in civil law systems in particular, does not provide sufficient guidance for the judging of cases anymore (Mak, 2012).

We search for evidence that a primary focus on procedural aspects by courts is more likely to influence the outcome of judicial decisions on regulatory issues. We also assume that, when there is stricter judicial scrutiny, judicial control will target regulatory tasks of creating norms, since courts are more confident in assessing their conformity to legal aspects. In addition, we seek evidence that the grounds of judicial rulings are more geared to fundamental rights and rule of law standards than to policy rationality assessments. In this sense, legal grounds would influence the outcome of court rulings more than the quality of regulators' reasoning and the application of their bureaucratic discretion. Therefore, the following hypotheses are stated:

Hypothesis H1a - Procedural aspects are more likely to influence the outcome of judicial decisions on regulatory issues.

Hypothesis H1b - When there is stricter scrutiny, judicial decision will focus on the legality of acts of the regulatory agencies in setting norms.

Hypothesis H2 - Judicial decisions grounded in fundamental rights and rule of law principles are more likely to influence the outcome of court rulings on regulatory matter than policy rationality grounds.

4.3 Data and Method

Brazil has 11 federal regulatory agencies listed in the General Law of Regulatory Agencies (Law Number 13,848 enacted in 2019). Seven of these agencies, the Brazilian Economic Competition Council and the Securities and Exchange Commission were included in the research. Several studies on judicial review have included antitrust agencies and financial regulatory bodies (Baye & Wright, 2011; Wright & Diveley, 2013; Revesz, 2017; Mejia, 2020) because of their autonomy and expertise. Three agencies involved in few judicial cases (fewer than 10 cases) were excluded from this research: Water Agency; Waterway Transportation

Agency and Cinema Agency. The Mining Agency was also excluded because it was only created in 2018 and no appeal cases related to it were found.

Decisions of the Brazilian Federal Regional Courts of the 1st Region (TRF1) and of the 3rd Region (TRF3) were analyzed. Court rulings were collected, organized, processed and analyzed to identify factors that feature in judicial decisions involving regulatory matters. In Brazil, the competence to judge lawsuits challenging decisions of federal regulatory agencies falls on federal judges of the first instance, and such cases are assessed, on appeal, by the Regional Federal Court of the region in which they are processed. TRF1 is headquartered in Brasília, the Brazilian capital city, and as several agencies are also headquartered there, many lawsuits are filed in this venue. TRF3 is headquartered in São Paulo state, which accounted for 32.2% of Brazil's GDP in 2017 (Seade, 2019). The political and economic strength of those regions make it possible to look for allow us look for distinct features of regulatory judgments. The decision to research appellate court rulings was made because they involve cases that undergo rigorous scrutiny for procedural admissibility after the decision of a first-degree court and then are submitted to a panel of three senior judges, so that they represent mature litigation cases. Appellate rulings, the final collegial decision, also usually entails a synthesis of the litigation, focusing on key issues.

The database consisted of 1,353 cases judged between 01/01/2010 and 31/12/2019 in which the nine agencies selected were involved, either as plaintiffs or as defendants. The time frame reflects the fact that regulatory agencies are recent institutions in Brazil and allows for the judiciary to have had a period to become familiar with this institutional model during the 2000s. As of 2010, appellate courts would also have experienced more regulatory matters and appeals, since it takes a rather long time for regulatory cases to be judged by courts of first instance (CNJ, 2011). It, therefore, took some time for them to be appealed before a federal appellate court. Table 3 presents the agencies selected and the distribution of judicial proceedings on regulatory matters in the courts analyzed.

Table 3 – Regulatory bodies and distribution of judicial cases¹ in the selected courts

Agency	Sector	TRF1	TRF3	Total
Supplementary Health Service Agency	Private health	34	296	330
Petroleum, Natural Gas and Biofuels Agency	Oil and Gas	130	110	240
Sanitary Surveillance Agency	Food and Drugs	119	115	234
Land Transportation Agency	Land Transportation	127	53	180
Electricity Agency	Electricity	50	126	176
Telecommunications Agency	Telecommunications	53	54	107
Economic Competition Council	Competition	35	0	35
Securities and Exchange Commission	Financial Regulation	8	24	32
Civil Aviation Agency	Air Transportation	8	11	19
Total		564	789	1,353

Source: Research data from available information from electronic judicial records in TRF1 and TRF3 websites.

¹ The category of appeal chosen for the purpose of this research was that of civil appeals.

Data was extracted by preparing a web scraping scheme, building crawlerbots that made it possible to download all appeal cases heard by the courts researched, through virtual machines that processed the data and made it possible to build an SQL database. Once the cases were downloaded, two packages were created in R programming software to make the content reproducible and available for open use by other researchers. The packages made it possible to download, read and organize the data, providing a semi-structured database with information in the natural language format, such as the content of decisions, and some case characteristics such as procedural class, case number, judge-rapporteur and the date of the corresponding decision. The programming script performed the automated classification of decisions using R regular expression identification tools, such as the names of the agencies on the active (plaintiffs) or passive (defendants) sides of the cases, and the cases of upholding or dismissing the decisions.

Database

The procedures stated in the section above made it possible to build a tailored database for the research, following the strategy of only including court decisions substantively related to the subject of regulation as well as legal-procedural discussions related to the activities of regulators. Decisions about subjects such as personnel management, public procurement and outsourcing, that did not match the objective of the research, were excluded. In Brazil, after a regulatory agency applies pecuniary fines, and in the event of default by the individual or company on which the fines are levied, the government may sue to recover fines and in the last resort foreclosure proceedings through a unique legal procedure. In these cases, the proceedings take on characteristics almost exclusively related to tax law, which puts them beyond the scope of our research purposes. For this reason, all tax foreclosure proceedings were excluded from

the database. Cases focused exclusively on discussion of attorney fees. Cases that were not heard by the court (cases referred back to trial courts) were also excluded.

While automated data harvesting proved to be quite efficient for the required filtering, to classify the subject matter and grounds of the decision manual methods and case-by-case reading were necessary in order to build a reliable and operable database. Procedural classification is performed subjectively by court officials based on the unified case classes set by the Brazilian National Justice Council (CNJ) and more recently there has been the possibility of lawyers filling out petitions online and performing the classification themselves. When appellate decisions were read, it was seen that they involved several dozen subjects and most of them clearly did not match the content of the decision. Using the nominal classification without manual checking would jeopardize analysis of what was actually decided and its relationship to the final result of the case.

Consequently, codification was made after reading all the decisions. Based on the content of the decisions it was possible to develop the classification according to the categories shown in Table 4. The coding criteria were adapted from Mejia (2020), in relation to the regulatory task or capacity under challenge (Jordana et al., 2018) and to the grounds of the appeal (Bignami, 2012) presented in the court ruling. The codification of the subject “procedural” was also included among the subjects of court rulings, following the argument of Maranhão (2016), who pointed out that Brazilian courts often focus on procedural issues rather than on specific regulation issues. A more detailed explanation of the coding analysis is presented in Appendix 2.

Table 4 – Analysis of the content of a decision

Coding unit	Categories	Elements contained in the text of the decision
Subjects of court ruling	Sanction (Capacity to implement sanctions)	Fine imposed by the regulatory body, identification and enforcement of infractions or another type of obligation imposed on the individual/regulated entity.
	Norm (Capacity to make norms)	Discussion on the powers and legality and acts of the regulatory agencies in setting norms, ordinances, etc.
	Supervision (Capacity to supervise)	Discussion on the powers of the regulatory body in defining matters related to supervision and protection of the public interest. (e.g., setting of standards, goals, general conditions and the like by the agency, including decisions on issuing registration certificates)
	Price-setting (Capacity to establish price)	Regulators' acts related to price-setting and charging and raising rates, as well as other price control matters.
	Market (Capacity to establish market entries and exits)	Licenses/concessions/market entries or barriers, operating authorizations or the enactment of special inspection regimes in private entities.
	Procedural	Discussion focused on matters related to civil procedural law (e.g., statutes of subpoenas, costs, nullities, lack of action, legitimacy to be on the passive side, etc.)
Grounds of the decision	Rule of Law	Assessment by the court if the agency decision violates the purposes and limits set down by laws passed by legislative or executive decrees, for example: jurisdictional incompetence; purpose of the decision forbidden by law; violation of the law, error of law; inconsistency with applicable statutes; in excess of statutory jurisdiction; illegality.
	Fundamental Rights	Assessment by the court if the agency decision violates basic liberties and rights, for example lack of proportionality and equity, unfairness and abuse of power.
	Policy rationality	Assessment by the court regarding the quality of agency reasoning and to the application of its bureaucratic discretion.

Source: Own elaboration based on Bignami (2012), Jordana et al. (2018) and Mejia (2020).

Construction of the variables and further explanation

Factors influencing regulatory decisions were assessed by means of descriptive statistics, as well as logistic regression analysis. Among the variables that make up the model, two stand out because they were considered to be proxies for the complexity of the proceedings: length of the proceedings and the amount in dispute. Case duration is a variable not often examined in judicial review of regulatory decisions, but it is important to highlight that in strong economic sectors time represents a crucial asset and delays may cause huge damage to market participants (Bajakić & Kos, 2016). The initial date of the petition to first-tier court was considered, since the data was available for both courts. The specific date on which cases was appealed before the TRF3 was not available.

The amount in dispute was included as a second proxy variable for the complexity of the proceedings. According to the 2012 Brazilian Code of Civil Procedure, the amount in dispute is the economic value attributed to a case. It involves the economic potential for the parties

resorting to the judiciary for settlement and is equivalent to the monetization of the facts involved. This amount is defined by the plaintiff at the beginning of the proceedings. For cases judged by the TRF3, it was possible to find the amount in dispute automatically in the court's database through web scraping. For the TRF1, we had to file a specific request to access this information. However, the court claimed it was only able to locate and provide data for no more than 225 cases out of a total of 564 (the partial data was used in the regression model). In addition to the individual amounts, three value ranges were also included in the statistical models.

In logistic regression models our response variable is binary, 0 or 1 (no or yes), and it allows us to estimate the odds-ratio (and its probability) associated with the occurrence of a given event in the face of a set of explanatory variables. This type of regression provides results in terms of probability, which is highly interpretable. In this case, the dependent variable was the decision ruling in favor of the regulatory agency (value 1) or against it (value 0). As independent variables, the following were considered: the amount in dispute, ranges of the amount in dispute, the subjects involved in the decision, the grounds of the decision, courts, agencies and length of the proceedings (see Table 6).

Regarding the classification of the subject of the decision, after reading and using the coding elements shown in Table 4, the main subject was chosen among sanctions, norms, supervision, price-setting, market and procedural subjects. Several decisions in relation to a sanction or supervision act also brought about a discussion of the norm underlying them. In those cases only the main theme, sanction or supervision, has been codified. For the grounds of the decision, different combinations of grounds related to the rule of law, individual rights and policy rationality were taken into account, allowing for seven possible classifications (Table 5).

Table 5 – Variables of the research

Dependent variable	Decision ruling in favor of the agency (value 1) and Decision ruling against the agency (value 0)
Independent Variables	Telecommunications agency, Land Transportation agency, Electricity agency, Oil and Gas agency, Civil aviation agency, Sanitary Surveillance agency, Economic Competition Council, Securities and Exchange Commission, Supplementary health agency, subject norms, subject price-setting, subject sanction, subject supervision, subject market, subject procedural, Rule of Law grounds (Ru), Policy Rationality grounds (Po), Individual Rights grounds (R), Policy and Individual Rights grounds (PR), Policy and Rule of law grounds (PRu), Individual Rights and Rule of law grounds (RR), Individual Rights, Rule of Law and Policy Rationality grounds (RRP), TRF1 Court, TRF3 Court, Amount in dispute, Amount in dispute – range of the amount (up to R\$ 500,000), Amount in dispute – range of the amount (up to R\$ 1 million), Amount in dispute – range of the amount (above R\$ 1 million), Length of the proceedings (number of months)

Source: Own elaboration

4.4 Results and discussion

For the period 2010 to 2019, we identified a total of 1,353 decisions on appeals filed in which a regulatory agency was party, either as appellant or as appellee (Table 1). Both appeal courts (TRF1 and TRF3) dismissed appeals in the majority of the cases (74.5%). Previous studies have highlighted legal uncertainty between first and second degree of jurisdiction in the judicialization of regulatory matters (CNJ, 2011; Maranhão, 2016). The present findings show evidence that the selected appeal courts tend to uphold first degree decisions most of the time in relation to final appeal rulings and suggest that the Brazilian model of judicial review remains slow. The average length of the proceedings listed in the database is 88.3 months for TRF1 and 73.5 months for TRF3. Although judicial delays are not a problem exclusive to lawsuits involving regulatory matters, the impact of long proceedings are greater in relation to this subject (Posner, 2010; Shleifer, 2010).

As shown in Table 6, appeal courts rule in favor of the regulatory agencies in 54% of the decisions (appeals granted when the agency is appellee plus appeals denied when the agency is appellant). Therefore, there is not a clear judicial bias in favor or against regulatory decisions and there is a considerable level of unpredictability regarding the judicial control applied to the regulatory bodies researched, in relation to rulings in their favor or against them.

Table 6 – Outcome of court rulings related to regulatory agencies

Agency Position	Appeal Denied	Appeal Granted	Total	Court ruling in favor of the agency (a+d)	Court ruling against the agency (b+c)
Agency as appellee	601 ^a (44%)	215 ^b (15.8%)	816 (60%)	731 (54%)	622 (46%)
Agency as appellant	407 ^c (30%)	130 ^d (9.6%)	537 (39.7%)		
Total	1008 (74.5%)	345 (25.5%)	1,353 (100%)		

Source: Research data.

Table 7 provides an overview of the different subjects and grounds of the decisions in the court rulings. The norms and powers of sanction of the regulators are frequent targets of judicial review and account for more than 64% of judicial decisions. Lawsuits exclusively related to procedural aspects accounted for 8.1% of the total. Price-setting is the least frequent subject (4.5%) but this kind of case has become rare among Brazilian regulatory agencies since their main mission is to promote the free market and competition. Regarding the grounds for the decision, the category Rule of Law accounts for 42.5% of the decisions. When it is associated with individual rights the percentage reaches 62% of the rulings, meaning that the courts usually focus on legal controls and on strict interpretation of the law.

There are discussions about the regulatory bodies' policy rationality in 38% of the decisions, meaning that in those cases the courts scrutinize regulatory aspects of the litigation in a deeper way. Judicial review is more profound and covers all the three main grounds of the decision that were coded (Rule of Law, Individual Rights and Policy Rationality) in 19% percent of the cases.

Table 7 – Court rulings by subject and grounds of the decision

Subject	Number of cases	%	Grounds of the decision ¹	Number of cases	%
Norms	495	36.6%	Rule of law (ru)	575	42.5%
Sanction	378	27.9%	Fundamental rights and rule of law (rr)	264	19.5%
Supervision	228	16.8%	Fundamental rights, Rule of Law and Policy Rationality (rrp)	257	19%
Procedural	110	8.1%	Policy rationality and rule of law (pru)	243	18%
Market	81	6%	Policy rationality and Fundamental rights (pr)	14	1%
Price-setting	61	4.5%			

Source: Research data.

¹ No decisions were identified as Policy Rationality or Individual Rights grounds alone.

Table 8 presents the distribution of cases among the regulatory agencies and percentages of rulings in favor and against them (agency appellant and denied decisions plus agency appellee and granted decisions). The regulatory bodies for financial supervision,

telecommunications and supplementary health have the highest percentages of judicial rulings in their favor. The utility regulators for electricity, land transportation and oil and gas have the highest percentages of rulings against them.

Table 8 – Outcome of court rulings by agency

Agency	Rulings in favor	%	Rulings against	%	Total
Civil Aviation agency	10	52.6	9	47.4	19
Telecommunications agency	69	64.5	38	35.5	107
Electricity agency	57	32.4	119	67.6	176
Oil and Gas agency	125	52	115	48	240
Supplementary Health agency	218	66	112	34	330
Land transportation agency	86	47.8	94	52.2	180
Sanitary Surveillance agency	125	53.4	109	46.6	234
Economic Competition Council	20	57.1	15	42.9	35
Securities and Exchange Commission	21	65.6	11	34.5	32
Total	731		622		1,353

Source: Research data.

Inferential Results

To explore the relationships between the independent and dependent variables in a logistic regression, six different analysis models were run (Table 9):

Table 9 – Analysis models of the logistic regression

Model B1	decision_agency ~ agency + subject + grounds_of_the_decision + court + scale (amount_in_dispute)
Model B2	decision_agency ~ agency + subject + grounds_of_the_decision + court + range_of_the_amount_in_dispute + scale (length_of_the_proceedings)
Model B3	decision_agency ~ subject + grounds_of_the_decision + court + range_of_the_amount_in_dispute + scale (length_of_the_proceedings)
Model B4	decision_agency ~ agency + grounds_of_the_decision + court + range_of_the_amount_in_dispute + scale (length_of_the_proceedings)
Model B5	decision_agency ~ subject + court + range_of_the_amount_in_dispute + scale (length_of_the_proceedings)
Model B6	decision_agency ~ court + range_of_the_amount_in_dispute + scale (length_of_the_proceedings)

Source: Own elaboration.

The results of the logistics regression are summarized in the Table 10.

Table 10 – Results of the logistic regression model¹

Variables	Model B1	Model B2	Model B3	Model B4	Model B5	Model B6
(Intercept)	0.520 (0.701)	0.127 (0.797)	0.740 (0.859)	0.363 (0.979)	0.162 (0.487)	-0.433 (0.393)
Scale (length of the proceedings)	0.358*** (0.071)	0.357*** (0.072)	0.360*** (0.075)	0.386*** (0.077)	0.340*** (0.074)	0.346*** (0.071)
Scale (amount in dispute)	-0.965 (1.341)					
Ground pru	-0.871 (0.699)	-0.861 (0.699)	-0.781 (0.721)	-0.557 (0.725)		
Ground rr	-0.805 (0.703)	-0.805 (0.703)	-0.734 (0.727)	-0.899 (0.729)		
Ground rrp	-0.533 (0.700)	-0.525 (0.700)	-0.680 (0.723)	-0.601 (0.724)		
Ground ru	-0.375 (0.690)	-0.354 (0.690)	0.243 (0.721)	-0.411 (0.722)		
Court TRF3	0.436*** (0.160)	0.452*** (0.163)	0.570*** (0.175)	0.508*** (0.177)	0.596*** (0.170)	0.511*** (0.161)
Range amount of the dispute up to R\$ 500,000		0.434 (0.393)	0.414 (0.404)	0.419 (0.405)	0.354 (0.394)	0.384 (0.391)
Range amount of the dispute up to R\$ 1 million		0.309 (0.418)	0.279 (0.430)	0.255 (0.436)	0.292 (0.420)	0.297 (0.416)
Subject Norms			-1.321*** (0.378)		-0.768** (0.352)	
Subject Price-setting			-1.361*** (0.511)		-1.058** (0.494)	
Subject Procedural			-1.825*** (0.437)		-1.056*** (0.403)	
Subject Sanction			-0.416 (0.360)		-0.427 (0.354)	
Subject Supervision			-0.608 (0.375)		-0.518 (0.368)	
Telecomm agency				0.132 (0.622)		
Electricity agency				-1.625*** (0.602)		
Oil and Gas agency				-0.172 (0.586)		
Supplementary Health agency				0.168 (0.590)		
Land Transportation agency				-0.189 (0.594)		
Sanitary				-0.171 (0.582)		
Surveillance agency				0.394 (0.823)		
Competition Council				-0.576 (0.713)		
Securities and Exchange Commission						
Number Obs.	1014	1014	1014	1014	1014	1014
AIC	1356.0	1358.6	1332.7	1303.2	1358.8	1362.2
BIC	1395.3	1402.9	1401.6	1386.8	1408.0	1386.8
Log.Lik.	-669.986	-670.301	-652.358	-634.581	-669.394	-676.091
Pseudo R2	0.044	0.044	0.077	0.109	0.045	0.033

* p < 0.1, ** p < 0.05, *** p < 0.01

¹ Observations: All numerical variables were scaled. In order to identify multicollinearity issues, the variance inflation factor (VIF) was estimated in all models and no outliers were found.

According to the results of log-likelihood, AIC (Akaike Information Criterion) and BIC (Bayesian Information Criterion), Model B4 is the one with the best fit of all the models. In all models, the length of the proceedings is significant and its impact is positive, indicating that the longer the case lasts the more probable the judicial decision will be in favor of the regulators. Regarding the amount in dispute, the values and range of values which were taken into account do not seem to have an effect in court rulings in favor or against the regulators. However, we could only use part of the data available for TRF1 (225 cases out of a total of 564 cases). To overcome this shortcoming, further research is recommended to assess the influence of this variable in regulatory judicial review.

According to Popelier (2012), by fostering arguments of procedural rationality in regulatory decisions, judicial review enables courts to protect regulated agents against arbitrary intervention on the part of regulators, even when complexity or the political nature of a decision prevents the court from assessing the substantive merits of the case. Mejia (2020) argued that Spanish courts' scope of review is commonly limited to scrutinizing procedural aspects of a regulator's decision and they generally defer to regulatory decisions. In the present study, procedural subject feature negatively in Models B3 and B5, indicating that court rulings grounded in procedural issues are more likely to produce decisions against the regulators. This result supports hypothesis **H1a** and partially confirms what Mejia (2020) found in the cases of Spain and the United Kingdom, as Brazilian courts also focus on reviewing legal-procedural issues. However, in Brazil a review of procedural issues is more likely to result in a ruling against the regulatory agency.

Norms and price-setting subjects also feature negatively in Models B3 and B5, indicating rulings against regulatory authorities. In relation to norms, this finding support hypothesis **H1b**, that is, when courts go beyond examination of procedural issues, they mainly focus on norms and their legality. The familiarity of courts with principles of administrative law and open legal standards that are liable to subjective interpretation (Posner, 2010) may explain why the courts frequently overturn the actions regulators in their task of setting norms. Although there are only a few price-setting cases, their social and economic sensitivity may explain why the courts overturn more regulatory actions, and the cases last longer, since economic issues are more contested in judicial review (Napolitano, 2014).

The research findings provide no support for hypothesis **H2**. The regression analysis indicates that the grounds for the decision do not have a significant effect on the final decision issued by the courts. It was anticipated that scrutiny of fundamental rights or rule of law rights

would have an effect on rulings for or against regulatory bodies. However, although these grounds are more common than cases related to policy rationality assessments, they do not seem to influence the outcome of legal proceedings.

All the models in Table 10 indicate that cases brought before TRF3 (São Paulo) are likely to receive a ruling in favor of the regulators. The distinct court profile and composition seems to be associated with more judicial deference to regulatory authorities and has a strong influence in the outcome of judicial review of regulatory decisions. This result adds complexity to the Brazilian panorama of regulatory judicialization and indicates that different courts behave differently in relation to this specific litigation.

The findings also indicated that the electricity regulator was the only regulatory body that had judicial decisions that were statistically significantly different from other agencies; the negative coefficient indicates that appeal rulings were more likely to be against that authority. Although there are few cross-sector comparative studies of the judicialization of regulation, it is possible to draw some inferences from this result. The electricity agency was created in the first phase of Brazilian regulatory reform in the 1990s, which focused in essential infrastructure sectors that were economically and socially sensitive, such as electricity. The Brazilian electricity industry underwent a process of judicialization, especially in the mid 2010s, related to market specificities and to an institutional model that comprises several public and private players in designing rules for the sector (Gomes & Poltronieri, 2018). Monteiro, Ravena & Conde (2013) argued that competing regulatory instances favor judicialization of public policies in the electricity industry and reduce the effectiveness of regulatory instruments.

4.5 Conclusion

This article researches judicial review of regulatory decisions. Among the variables analyzed, factors that stood out were the length of the proceedings, a dimension that is not often addressed in the literature, and the amount in dispute, a factor about which no empirical studies were found. Such variables deserve special attention, since they may be seen as proxies for the complexity of the proceedings, a particularly important aspect of regulatory judicial review. Data analysis showed that case duration was statistically significant and should be included in new studies related of judicial behavior on regulatory issues.

The present findings also indicate that courts are prone to analyzing legal-procedural issues rather than reviewing regulators' policies, and that a focus on those aspects favors rulings

against those bodies. Since the more technical the issue under review, the less comfortable judges feel in assessing a decision, it seems that courts are more comfortable intervening in legal-procedural issues. The discussion of regulatory norms and price controls in appeal cases seems to indicate lower levels of judicial self-constraint, and the courts are more likely to scrutinize the authorities' tasks. Judicial decisions in regulatory matters are frequently grounded in rule of law or fundamental rights, but this research could not identify major influences on final court rulings regarding those legal grounds. In relation to the comparative approach across regulators of different sectors, the electricity regulator has the highest percentage of judicial decisions against it, and the logistic regression confirmed that courts are more likely to issue rulings against it.

The results presented here can and should be statistically refined. Machine learning models, such as decision trees, seem to be an appropriate means for this task. They make it possible to assess probabilities that appeal decisions will be favorable or unfavorable in different categories and provide a better basis for understanding judicial behavior in the phenomenon in question. Further empirical research and comparative studies are also needed on the characteristics of appeal cases that lead to more or less judicial scrutiny of technical discretion of independent regulators, such as the policy sector or court profile. Future research could explore those factors.

In methodological terms, this paper sought to contribute to the discussion by building a database of decisions made by two important Brazilian appellate courts, thereby improving our understanding of judicial behavior in the regulation field, beyond the studies that have been carried out in the United States and Europe. Specifically with regard to studying judicial decisions and the behavior of courts, using data and text mining techniques such as those adopted here provided several benefits. These benefits included reducing the time required to operationalize research on a large number of decisions, providing greater autonomy for the researcher to set up a tailor-made database supported by empirical strategies that serve as a basis for the guidelines for data collection and extraction, and reducing the dependence of the researcher on databases produced by third parties and built on unclear criteria, such as the jurisprudence repository of court decisions. However, there is still a long way to go, as the aforementioned advantages often come up against data organized by the courts themselves, with frequent missing data problems, erroneous filings and lack of standardization between different courts.

5 CONCLUSIONS AND RECOMMENDATIONS

More than a legal alternative available to people and enterprises dissatisfied with administrative decisions, the judicial review of regulatory decisions has far-reaching implications for the realm of public administration. Regulatory agencies play an important role in the development and implementation of policies that often have a direct bearing on citizen lives. Regulatory bodies are increasingly called upon to make relevant technical, economic and social choices in highly sensitive public issues. A large literature has sought to explain the regulatory agency model, and under which conditions regulatory authorities manage to act independently from their principals, most notably the executive branch. Regulatory agencies' interactions with other players which also have legitimate access in the regulatory space – such as courts – receive much less attention.

This thesis sought to address factors that affect the judicial review on regulatory matters in Brazil, as well as exploring divergences and boundaries among prominent state actors in regulatory litigation. In order to achieve this general objective, we dealt with research questions that were associated with how law-and-courts and regulatory agencies professionals diverge and set boundaries, as well as in relation to factors that have a relevant impact on how regulatory litigation is handled by the judiciary. These research questions emerged from the literature on judicial oversight (from an interdisciplinary and regulatory perspective) and from the review of empirical studies on how judicial review of regulatory matters has been actually determined.

By concluding this thesis, consideration is given to the main contributions and findings that this study has extended. Attention is also focused on how findings from this thesis could contribute to a future research agenda together with an assessment of the limitations of this study. Recommendations are then made on how the results could be applied to practical improvements in the relationship between regulatory agencies and courts.

5.1 Main contributions

In the multifaceted realm of regulation, comparisons are much needed in order to achieve a broader understanding of the regulatory state (Jordana et al. 2018; Mejia, 2020). Along this line, this thesis adopted a comparative approach across regulators of different sectors, as well as in relation to two different courts. The subjects of court rulings (regarding to the regulatory task under challenge), the grounds of the decision and the interviews with professionals with

similar duties, profiles and experiences with regulation made feasible the comparison across different regulatory sectors.

The pervasive influences of judicial review on regulation are not to be found only by seeking formalized laws and organizational roles. In this sense, a triangulated analysis was performed with evidence gathered through court rulings and interviews with judges and agencies' officials and attorneys. The two methods used in the empirical studies complemented each other adequately. The 21 interviews that were undertaken supplied nuance and context as well as provided the actors' subjective perceptions in relation to their working practices and experiences. The range of interviews was balanced to involve professionals in varied positions within the regulatory bodies and courts and allowed a broad portrait of the way key players address regulatory litigation. Quantitative analyses based on an original dataset with 1,353 appeal rulings provided additional and complementary insights in how courts operate judicial review in practice, as well as factors that stood out in regulatory litigation.

Despite the relevance of the principal-agent framework and public and private interests' theories in regulation, some of their core assumptions would fail in clarifying about when courts or regulatory bodies should be mobilized to settle disputes or utilized to establish expertise-based standards. In this sense, the empirical analyses carried out in this thesis aimed at enhancing the understanding of the phenomenon through other analytical lenses. Sociological institutionalism and the concept of regulatory space have proven useful for the study of regulation from a systemic perspective and the need of coordination between different domains. These perspectives also address how regulatory actors are embedded in complex multi-dimensional relations of interdependence and how independent regulators are confronted with the power and constraints of law and courts. Aiming to complement the institutional analyses, the law and economics approach offered relevant insights for the distinct roles performed courts and agencies in dealing with regulation.

This thesis contributes to the studies of regulation by focusing on the choices of actors with authority in the regulatory space and the need of coordination between distinct domains. Regarding the relationship between regulatory agencies and courts, judicial review is the only coordinating mechanism between these two bodies and it has a crucial role in defining important aspects of regulatory policies and in controlling administrative behavior. In relation to regulatory bodies and courts, the mobilization of one rather than the other makes explicit the blurred nature of the boundaries in the regulatory space (Vibert, 2014). The present research has synergies with literature exploring the shift of rule-making competences from legislators to

administrative branches and the increased demand of accountability of independent agencies. Both phenomena have prompted a worldwide increase of judicial oversight of administrative action.

Research on regulation involves an interdisciplinary endeavor to uncover how relationships between organizations and other social actors shape regulatory choices and how players' perceptions and actions give meaning to them. In relation to the judicial review of regulation, which is still much restricted to the legal academics, there is a lot of room for a fruitful dialogue with other social sciences. This thesis contributes to research on judicial decision-making which receives increasing academic attention among different disciplines with a close dialogue with public administration, as namely: administration of justice, law and society, empirical legal studies and law and politics.

5.2 Main findings

Chapter 2 articulated a discussion of the main tensions between agencies and courts and a literature review was carried out aiming to address knowledge fields which have so far received little attention in discussions of the judicial review of regulation. Chapter 2 concluded with two propositions of research. The first one is stated below:

Proposition 1: The overlapping of authority in the regulatory space leads to conflicts between legal control by courts and the application of regulatory standards by regulatory agencies.

Proposition 1 was addressed by Chapter 3 and it was confirmed in the empirical research. Both courts and regulatory bodies are called upon to dispose of issues involving regulation and a considerable overlap exists between these players with authority and legitimate access to the regulatory space. Regulatory space approach challenges formal assumptions that regulatory outcomes can be achieved solely by hierarchical application of coercive powers or by a strict functional division of roles in the regulatory agency model. As courts and agencies are carriers of distinct institutional logics, the regulatory space where they operate also highlights the conflicting nature of the regulatory arena where state actors compete for influence. Courts and agencies seek to influence regulatory decisions according to their values and interests and mobilize resources in order to achieve the prevalence of legal principles or technical expertise inputs. The role of co-regulators and other players working laterally, instead of the focus on

vertical relations in the principal-agent framework reinforces regulatory space approach in diagnosing regulatory issues.

Judicial review on regulatory matters involves a delicate institutional balance. On the one hand, the judicial competence to review administrative regulatory actions has expanded as a result of shifts in the balance of powers between the branches of government. On the other hand, the emergence of shared standards for policy-making and judicial review has challenged judges to familiarize themselves with normative and technical frames for assessing regulatory decisions (Mak, 2012).

Chapter 3 shed light on how regulatory decision-making is continuously tested in courts and it contributes to the empirical literature on regulatory space by identifying how key state actors develop different perceptions and attitudes in relation to the scope of regulation. By examining the boundaries and divergences among them, the study extends the literature on judicial review on regulation matters in several aspects: it highlights the relevance of the role performed by the agencies' attorneys in bridging the gap between legal and technical rationalities; how economically powerful regulated agents take advantage of unclear boundaries in regulatory litigation and employ resources seeking the reinterpretation of regulatory rules in their favor; and an increasing interest by judges in weighing non-strictly legal arguments and engaging in more coordination with agencies.

The second proposition of research raised in Chapter 2 is stated below:

Proposition 2: Judicial review of decisions made by regulatory agencies involves conflicts of choice between regulatory and adjudicatory processes and technical-administrative and legal rationalities.

Proposition 2 was addressed by Chapter 4 and it was also confirmed by the empirical analysis. The collection of original data on court rulings allowed the testing of hypotheses about the drivers of judicial decision-making on regulatory matters. Law and economics approach offered complementary lenses for approaching the phenomenon. It was revealed that the judicial scrutiny on procedural aspects, which is more familiar to the courts, is more likely to influence the outcome of judicial decisions on regulatory matters and such impact is associated to rulings against the agencies. It was also identified that when there is a stricter scrutiny, judicial rulings are more likely to focus on the legality of acts of regulators in setting norms and courts' intervention is again related to overruling agencies' decisions. Such "preferred" choices are probably related to the greater confidence of courts in assessing regulatory rule's conformity

to procedural and legal aspects.

Broadly speaking, legal-procedural safeguards would set the courts apart from agencies' focus on technical reasoning. In the backdrop of those divergences in interpretation there is a conflict between the legal rationality and the technical-administrative rationality. The former concerns the requirements which need to be fulfilled in order to assure equality before the law, legal security and protection from arbitrary governmental action, among other open-ended legal values and principles. The latter involves technical-scientific knowledge and experience which are mobilized in order to enable rational and efficient regulatory choices and outcomes. Regulator's expertise is a key asset in the context of regulatory reforms worldwide which are often linked to policy goals of competitiveness, innovation and economic growth.

Chapter 4 also provided insights into the identification of variables related to the judicial review of regulatory decisions. Among other variables used in the data analysis, the length of the proceedings, specific sector under regulation and the amount in dispute have synergies with literature exploring factors that lead to a higher or lower degree of judicial scrutiny of decisions issued by independent regulatory agencies. The regulatory tasks under challenge and the grounds of the decisions provide the basis for further refinements regarding to aspects which are more challenged in courts and respective implications for regulatory policies and outcomes.

One evidence of the complementarity between Chapters 3 and 4 is related to one regulatory task that was approached differently in the two empirical studies. The litigation related to fines emerged as a sensitive issue under the perspective of some interviewees (Chapter 3) while in the subject "sanction" was not statistically significant in relation to the final outcome of court rulings (Chapter 4). Such different perspectives stem from the fact that some professionals belonged to the regulatory authorities showed a lot of discomfort in relation to high-profile cases involving high value fines. Despite not representing the majority of the judicialization related to agencies' sanctions, this specific litigation seems to undermine agencies' authority before powerful regulatees. According to some officials interviewed, small regulated agents are compliant with the majority of low value fines and even in the case of pursuing legal measures, they rarely succeed in courts. A distinct scenario takes place in relation to greater enterprises which often obtain success in avoiding or postponing big monetary penalties.

5.3 Limitations and Research agenda

As this thesis has focused on state actors' involvement with regulatory litigation, a broader research perspective on the phenomena should include the participation of private sector players. Individuals and enterprises which are parties in lawsuits against regulatory agencies would provide a richer panorama of courts' intervention in regulatory issues. Private lawyers should also be researched as they play a pivotal role in challenging agencies' decisions and according to some findings of the Chapter 3, they would present a better performance in courts, especially regarding high-profile cases.

Despite the richness of the research on judicial decisions and the greater availability of judicial data in the Internet, the present research experienced several shortcomings in handling with court rulings. Lack of standardization between different courts, frequent missing data problems and erroneous fillings make comparisons quite difficult. If it were not for these obstacles, analyses would have provided a more in-depth perspective of the judicial behavior regarding regulatory issues.

The judicial decisions collected for this study can and should be subjected to more refined text mining techniques. Identifying regular expressions where courts indicate their deference or not to agencies based on dictionaries of expressions and keywords can provide new and different insights into judicial behavior in the regulation field. In this regard, empirical data collection can be enriched by the contributions provided by the bureaucratic reputation theory, which is increasingly used for studying regulatory agencies (Carpenter 2001, 2010; Maor 2007, 2010). Such approach teaches us the way organizations manage the expectations of their multiple audiences (government, press, citizens) is crucial for organizational reputation and for ensuring the legitimacy of the regulatory authority (Carpenter, 2012). In this sense, knowing the extent to which the content of judicial decisions also incorporates evaluations and reputational dimensions seems to be a possible and promising way to unveil more subtle aspects of judicial posture towards regulatory agencies.

Several interviewees raised a lot complaints in relation to the increasing participation of the Brazilian Federal Court of Accounts (TCU) in regulatory issues. According to some of them, the excessive oversight by this audit body sometimes stifle regulatory policies and discretion. In this sense, the role of TCU and other state bodies that perform a role of co-regulation (as the case of the Prosecution Office, for example) should be a focus in future studies about the Brazilian regulatory governance.

5.4 Practical policy recommendations

This study has highlighted some dysfunctionalities of the current Brazilian system of judicial review of administrative and regulatory decisions. When listening to the main players of regulatory litigations some key aspects should be focus of attention. In this sense, some policy improvements could possibly lead to a more successful coordination between agencies and courts.

For regulatory agencies and officials

Most of the officials interviewed resented of the control applied by courts. Despite the risks and problems that judicial review may bring to regulatory policies, eventual absence of accountability in agencies' work creates an essential need for judicial scrutiny. Because of the lack of a more engaged legislative oversight in regulation, courts are the only legitimate institutional body able to provide the required safeguard to transparency. Recent legislation in Brazil has codified regulatory impact assessment (mainly in relation to new Regulatory Agency Act n. 13,348 enacted in 2019) which aims to evaluate systematically the potential impacts arising from government regulation. The requirement of ex ante regulatory impact assessments (RIA) would reinforce the regulatory due process and the legitimacy of agency rulemaking (Carvalho, Rondon & Marques, 2020).

Improvements in the operation of the rule of law in regulatory authorities and a better implementation of RIA statutory requirements would have the potential of putting agency decisions more attuned with existing legal doctrines under which regulation should be efficient, proportionate, reasonable and adequate. A better handling by the officials of the new legislation may possibly mitigate conflicts between courts and agencies in regulatory litigation in the next years, as well as improving the quality of regulation.

Through time and experience, some regulatory agencies have developed mechanisms in order to confirm their decisions and improve the compliance by regulated agents. Since 2012, the Telecommunications Agency has implemented a discount of 25% in the total value of applied fines if the individual or enterprise agrees in not pursuing administrative appeals. Such measure has been well received and evaluated within the agency since it seems to reduce the judicialization of fines because after being granted with a good discount the interest in judicial litigation is quite reduced. This initiative could be replicated by other regulatory bodies.

For courts and judges

The judicial review in which legal rationality competes with a host of other values in regulatory issues increases the need for an adequate exchange between courts and agencies. If judges and courts are to play their role in helping to clarify the scope of regulatory norms, they must be open to other disciplines - both cognitively and operatively.

The Brazilian Association of Federal Judges has a Forum on Competition and Regulation which holds regular events that provide guidelines for judges in relation to regulatory issues. Similar initiatives should be institutionalized by the Regional Federal Courts and by the National Council of Justice in the form of permanent working groups which could provide assistance for judges and a broader dialogue among regulatory stakeholders.

Regulatory litigation seems particularly suitable to mediation and legal conciliation because of its far-reaching impacts. However, as one judge interviewed pointed out, there is not a culture of mediation in public law issues in Brazil. In this sense, innovative court proceedings should be fostered in order to better equip courts to deal with complex cases and the specificities of regulatory technical reasoning.

When asked about specialized courts in regulation (as it occurs in some countries), some judges stated that they are possibly not the best solution. As judges usually stay in the same court for a long time, their long permanence in judging similar issues could even hinder regulatory innovation and jurisprudence. However, as regulatory techniques are unfamiliar to the legal training, courts should provide to judges a minimum training on regulation (and on related interdisciplinary skills) in order to ensure sufficient judicial expertise regarding regulatory litigation. Regulatory bodies' experts could take part in those trainings which could promote a fruitful and continuous dialogue between courts and regulatory agencies.

For regulatory agencies' attorneys

Chapter 3 has identified that agencies' attorneys perform an important role in "translating" regulatory bodies' policies before courts. However, some officials and judges and even some attorneys acknowledged that there is a big room for improving their performance. A couple of officials bemoaned that as the attorneys do not belong to the career staff of the agencies (they are linked to a career of the Attorney's General Office) some of them would not give their best for the agencies. However, the attorneys interviewed showed a great level of

commitment in relation to their tasks and their separation to the agencies' formal ranks possibly allows them to have a more reflective perspective on the agencies' strengths and weaknesses.

However, the fragilities of the current institutional design could be addressed by several initiatives. Some interviewees mentioned that public examinations for the federal attorneys' career do not encompass sufficiently regulatory subjects and some of the new attorneys designated to the agencies would present a gap in this specific knowledge. This issue could be addressed by a broader inclusion of regulatory subjects in the attorneys' entrance examinations or by inception courses on regulation for the newcomers.

Some judges interviewed highlighted that they would appreciate receiving information (e.g., reports, booklets, books and manuals) about regulatory practices and policies developed by the agencies. As the attorneys are the main focal point with courts they could provide this type of material in a more regular basis, as well as inviting judges for seminars and similar events on regulatory matters. Additionally, some judges mentioned that they would like to have a closer dialogue with some agencies during the formal legal proceedings, in the sense they would appreciate that the attorneys could engage in more active preparation for court hearings, in complement to the provision of written defenses in the lawsuits.

References

- Aith, F. (2016). Agências reguladoras de saúde e Poder Judiciário no Brasil: uma relação conflituosa e necessária para a garantia plena do direito à saúde. In: PRADO, M. M. (Org.). *O Judiciário e o Estado regulador brasileiro*. São Paulo: FGV Direito SP, 2016. 209-230.
- Avdasheva, S., Golovanova, S., & Katsoulacos, Y. (2019). The role of judicial review in developing evidentiary standards: the example of market analysis in Russian competition law enforcement. *International Review of Law and Economics*, 58, 101-114. <https://doi.org/10.1016/j.irl.2019.03.003>.
- Bajakić, I., & Kos, V. (2016). What can we learn about regulatory agencies and regulated parties from the empirical study of judicial review of regulatory agencies' decisions? The case of Croatia. *Central European Journal of Public Policy*, 10(1), 22–34. <https://doi.org/10.1515/cejpp-2016-0021>
- Baldwin, R., Cave, M. & Lodge, M. (2010). Introduction: Regulation – The field and the developing agenda. In Baldwin, R., Cave, M., Lodge, M. (eds.). *Oxford Handbook of Regulation*. Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199560219.001.0001>
- Baye, M. & Wright, J. (2011). Is Antitrust too complicated for generalist judges? The impact of economic complexity and judicial training on appeals, *Journal of Law and Economics*, 54(1), 1-24. <https://doi.org/10.1086/652305>.
- Bell, J. (2019). Judicial Review in the Administrative State. In de Poorter, J, Hirsch Ballin, E. & Lavrijssen, S (Eds.). *Judicial Review of the Administrative Discretion in the Administrative State*. The Hague, Netherlands: Springer. <https://doi.org/10.1007/978-94-6265-307-8>
- Berg, S. (2000). Sustainable regulatory systems: laws, resources, and values. *Utilities Policy*, 9 (4), 159-170. [https://doi.org/10.1016/S0957-1787\(01\)00012-1](https://doi.org/10.1016/S0957-1787(01)00012-1)
- Berry, F. et al. (2004). Three traditions of network research: what the public management research agenda can learn from other research communities. *Public Administration Review*, 64 (5) 539-552.
- Bignami, F. (2012). Comparative administrative law. In Bussani, M. & Mattei, U. (eds) *The Cambridge Companion to Comparative Law*. Cambridge University Press, Cambridge. <https://doi.org/10.1017/CBO9781139017206>
- Bignami, F. (2016). Introduction: a new field – comparative law and regulation. In Bignami, F. & Zaring, D. (Ed.). *Comparative law and regulation: understanding the global regulatory process*. Cheltenham: Edward Elgar.
- Black, J. (1997). 'New institutionalism and naturalism in socio-legal analysis: institutionalist approaches to regulatory decision making'. *Law & Policy* 19:51–93. <https://doi.org/10.1111/1467-9930.00021>
- Black, J. (2002). Decentring regulation: understanding the role of regulation and self-regulation in a “post-regulatory” world. *Current Legal Problems*, 54, 103-146.
- Canning, M. & O'Dwyer, B. (2013). The dynamics of a regulatory space realignment: Strategic responses in a local context. *Accounting, Organizations and Society*, 38 (3), p. 169-194. <https://doi.org/10.1016/j.aos.2013.01.002>
- Carvalho, B., Rondon, R., & Marques, R. (2020). Better utility regulation through RIA? Merits

- and implications based on the Brazilian case. *Utilities Policy*, v. 64. <https://doi.org/10.1016/j.jup.2020.101023>
- Carpenter, D. (2001). *The forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1862-1928*. Princeton, NJ: Princeton University Press.
- Carpenter, D. (2010). *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA*. Princeton, NJ: Princeton University Press.
- Carpenter, D. & Krause, G., (2012). Reputation and Public Administration. *Public Administration Review*, 72 (1), 26-32.
- Castro, A. S. (2017). O método quantitativo na pesquisa em direito. In Machado, M.R. (Org.) *Pesquisar empiricamente o direito*. São Paulo: Rede de Estudos Empíricos em Direito.
- Cohn, M. (2011). Law and Regulation: the role, form and choice of legal rules. In Levi-Faur, D. (ed.). *Handbook on the Politics of Regulation*. Cheltenham, UK: Edward Elgar. <https://doi.org/10.4337/9780857936110>
- Christensen, T. and Lægreid, P. (2006) Agencification and regulatory reforms. In Christensen and Lægreid (eds.) *Autonomy and regulation*. Cheltenham: Edward Elgar Publishing.
- Colburn, J. (2012). Reasons as Experiments: Judgement and Justification in the “Hard Look”. *Contemporary Pragmatism*, 9 (2), 205-239.
- Conselho Nacional de Justiça - CNJ (2011). *As inter-relações entre o processo administrativo e o judicial, sob a perspectiva da segurança jurídica do plano da concorrência econômica e da eficácia da regulação pública*. Retrieved from: <http://www.cnj.jus.br/images/pesquisasjudiciarias/Publicacoes/relat_pesquisa_usp_edita11_2009.pdf>.
- Cooter, R & Ulen, T. (2012). *Law and economics*. 6th ed. Cranbury, NJ: Addison-Wesley Longman.
- Coutinho, D. (2013). O direito nas políticas públicas in Marques, E. & Faria, C. (Org.). *Política pública como campo multidisciplinar*. São Paulo: Ed. UNESP.
- Deller, D. & Vantaggiato, F. (2015). Revisiting the Regulatory State: A Multidisciplinary Review Establishing a New Research Agenda, *CCP Working Papers*, No 14-9, University of East Anglia, UK: Centre for Competition Policy. Available at: <http://competitionpolicy.ac.uk/documents/8158338/8235397/CCP+Working+Paper+14-9.pdf/49db203a-9326-4b94-b46e-dedcf12bd751>. Accessed 1 June, 2020.
- DiMaggio, P. (1988). Interest and Agency in Institutional Theory, in Zucker, L. *Institutional Patterns and Organizations: Culture and Environment*. Cambridge, MA: Ballinger. <https://doi.org/10.1525/9780520313651>
- DiMaggio, P. & Powell, W. (1992). *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press.
- Dragu, T. & Board, O. (2015). On judicial review in a separation of powers system. *Political Science Research and Methods*, 3(3): 473–492. <https://doi.org/10.1111/ajps.12121>
- Dubash, N. & Morgan, B. (2012). Understanding the rise of the regulatory state of the South, *Regulation & Governance*, 6(3), 261-281. <https://doi.org/10.1111/j.1748-5991.2012.01146.x>
- Faraco, A., Pereira Neto, C. & Coutinho, D. (2014). A judicialização de políticas regulatórias

- de telecomunicações no Brasil. *Revista de Direito Administrativo*, 265, 25-44.
- Fisher, E., Pascual, P. & Wagner, W. (2015). Rethinking judicial review of expert agencies. *Texas Law Review*, 93, 1681-1721.
- Fix, M. (2014). Does deference depend on distinction? Issue salience and judicial decision-making in Administrative Law Cases. *Justice System Journal*. 35 (2), 122-138. <https://doi.org/10.1080/0098261x.2013.868283>
- Fix-Fierro, H. (2003). *Courts, Justice and Efficiency: a socio-legal study of economic rationality in adjudication*. Oxford: Hart Publishing. <https://doi.org/10.5040/9781472559524>
- Freire, A. et al (2017). Burocracia federal da área de infraestrutura: perfil, atuação, trajetória e percepções in Paula, J.; Palotti, P.; Cavalcanti, P., Alves, P. (orgs.), *Burocracia Federal de Infraestrutura Econômica: reflexões sobre capacidades estatais*. Brasília: IPEA and ENAP.
- Friedman, L. (1985). On regulation and legal process, in Noll, R. G. (ed.) *Regulatory policy and the social sciences*, Berkeley: University of California Press.
- Gelbach, J. B. & Marcus, D. (2018). Rethinking Judicial Review of High Volume Agency Adjudication. *Texas Law Review*, 96, 1097-1162.
- Geradin, D. & Petit, N. (2012). Judicial review in European Union competition law: A quantitative and qualitative assessment. In Derenne, J., Merola, M. (eds) *The role of the Court of Justice of the European Union in competition law cases*, Bruxelles: Bruylant.
- Gilardi, F. (2004). Institutional change in regulatory policies: regulation through independent agencies and the three new institutionalisms in Jordana, J. & Levi-Faur, D. (eds.) *The politics of Regulation: institutions and regulatory reforms for the age of governance* Cheltenham, UK: Edward Elgar. <https://doi.org/10.4337/9781845420673>
- Ginsburg, T. (2009). Judicialization of administrative governance: causes, consequences and limits. In: Ginsburg, T.; Chen, A. (Ed.). *Administrative law and governance in Asia: comparative perspectives*. Routledge University Press, 2009.
- Givati, Y. & Stephenson, M. (2011). Judicial deference to inconsistent agency statutory interpretations. *The Journal of Legal Studies*, 40 (1), 85-113.
- Gomes, R. & Poltronieri, R. (2018). The electricity sector and the structure of the short-term market in Brazil in Costa, J., Ribeiro, M., Xavier Junior, E. & Gabriel, V. (eds.). *Energy Law and Regulation in Brazil*. Springer. https://doi.org/10.1007/978-3-319-73456-9_6
- Gomes, R. C.; Liddle, J. & Gomes, L. (2010). A five-sided model of stakeholder influence. *Public Management Review*, 12 (5), 701-724.
- Guimaraes, T. A., Gomes, A. O., & Guarido Filho, E. R. (2018). Administration of Justice: An Emerging Research Field. *RAUSP Management Journal*, 53(3), 476-482.
- Hall, C., Scott, C. & Hood (2000). *Telecommunications Regulation: Culture, Chaos and Interdependence Inside the Regulatory Process*, London: Routledge.
- Hancher, L. & Moran, M. (1989). 'Organizing Regulatory Space' in Hancher, L. & Moran, M. (eds). *Capitalism, Culture and Economic Regulation*. Oxford: Clarendon Press.
- Hawkins, B. & Alvarez Rosete, A. (2019). Judicialization and health policy in Colombia: the implications for evidence-informed policymaking. *Policy Studies Journal*, 47 (4), p. 953-97.

- Helland, E. & Klick, J. (2012). Why aren't regulation and litigation substitutes? : an examination of the capture hypothesis in Coglianese, C. (ed.), *Regulatory Breakdown: The Crisis of Confidence in US Regulation*. Philadelphia: University of Pennsylvania Press. <https://doi.org/10.1017/S1537592714001157>
- Hertogh, M. & Halliday, S. (2004). Judicial review and bureaucratic impact in future research in Hertogh, M., Halliday, S. (eds.) *Judicial Review and Bureaucratic Impact*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511493782.001>
- Hume, R. (2009). *How courts impact federal administrative behavior*. New York, Routledge. <https://doi.org/10.4324/9780203875605>
- Jordana, J., Levi-Faur, D., Fernández-i-Marín, X. (2011). The Global Diffusion of Regulatory Agencies: Channels of Transfer and Stages of Diffusion. *Comparative Political Studies* 44, 1343–1369. <https://doi.org/10.1177/0010414011407466>
- Jordana, J., Fernández-i-Marín, X., & Bianculli, A. (2018). Agency proliferation and the globalization of the regulatory state: introducing a data set on the institutional features of regulatory agencies. *Regulation & Governance*, 12(1), 1-17. <https://doi.org/10.1111/rego.12189>
- Kessler, D. (2010). "Introduction" in Kessler, D. (ed.), *Regulation vs. Litigation: Perspectives from Economics and Law*, Chicago: University of Chicago Press.
- Kingsbury, B. & Donaldson, M. (2013). Roles of Law in Regulatory States of the South. In: Dubash, N. & Morgan, B. (Eds.). *The rise of the regulatory State of the South*. Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199677160.001.0001>
- Knight, F. & Johnson, J. (2007). The priority of democracy: a pragmatist approach to political-economic institutions and the burden of justification. *The American Political Science Review*, 101 (1), 57-61.
- Komesar, N. (1997). *Imperfect Alternatives: Choosing Institutions in Law, Economics and Public Policy*. Chicago: University of Chicago Press.
- Koop, C. & Lodge, M. (2015). What is regulation? An interdisciplinary concept analysis. *Regulation & Governance*, 11 (1), 95-108.
- Levi-Faur, D. (2005). The Global Diffusion of Regulatory Capitalism. *The Annals of the American Academy of Political and Social Science* 598, 12–32. <https://doi.org/10.1177/0002716204272371>
- Levi-Faur, D. (2011). Regulation and regulatory governance, in Levi-Faur, D. (ed.), *Handbook on the Politics of Regulation*, Cheltham: Edward Elgar. <https://doi.org/10.4337/9780857936110>
- Levy, B. & Spiller, P. (1996). A framework for resolving the regulatory problem in Levy, B. & Spiller, P. (Ed.). *Regulation, institutions and commitment*. Cambridge: Cambridge University Press, 1996.
- Li, Q. (2012). To prosecute or not to prosecute, that is the question: agency litigation under the influence of appellate courts. *Canadian Journal of Political Science*, 45 (1), 185-205.
- Lodge, M. (2016). Regulation Crisis in Scholarship. *CARR Discussion Paper n°.84*, 1-7. London School of Economics, London.
- Lodge, M. & Wegrich, K. (2012). *Managing regulation: regulatory analysis, politics and policy*. New York: Palgrave Macmillan.

- Losoncz, I. (2017). Methodological approaches and considerations in regulatory research, in Drahos, P. (ed.) *Regulatory Theory: foundations and applications*. Canberra: ANU Press. <https://dx.doi.org/10.22459/RT.02.2017>
- Louro, A. C., Santos, W., & Zanquetto Filho, H. (2017). Productivity Antecedents of Brazilian Courts of Justice: Evidence from Justiça em Números. *BAR - Brazilian Administration Review*, 14(4), e170032. Epub February 01, 2018.
- Maggetti, M. (2010). Legitimacy and Accountability of Independent Regulatory Agencies: a critical review. *Living Reviews in Democracy*, 2. [Last accessed 7 January 2020.] Available from URL: https://ethz.ch/content/dam/ethz/special-interest/gess/cis/cisdam/CIS_DAM_2015/WorkingPapers/Living_Reviews_Democracy/Maggetti.pdf
- Maggetti, M. (2014). Institutional change and the evolution of the regulatory state: evidence from the Swiss case. *International review of Administrative Sciences*, 80 (2), p. 276-297. <https://doi.org/10.1177/0020852313514517>
- Maggetti, M.; Papadopoulos, Y. (2016). The principal-agent framework and independent regulatory agencies. *Political Studies Review*, 14 (4), p. 1-12. <https://doi.org/10.1177/1478929916664359>
- Magill, E., & Vermeule, A. (2011). Allocating Power within Agencies. *The Yale Law Journal*, 120(5), 1032-1083.
- Majone, G. (1994). The Rise of the Regulatory State in Europe. *West European Politics*, 17, 77-101. <https://doi.org/10.1080/01402389408425031>
- Mak, E. (2012). Judicial Review of Regulatory Instruments: the Least Imperfect Alternative? *Legisprudence*, 6 (3), p. 301-319. <https://doi.org/10.5235/17521467.6.3.301>
- Mantzari, D. (2016). Economic Evidence in Regulatory Disputes: Revisiting the court-regulatory agency relationship in the US and in the UK. *Oxford Journal of Legal Studies* 35 (3), 565-594. <https://doi.org/10.1093/ojls/gqv035>
- Mantzari, D.; Vantaggiato, F. (2020). The Paradox of regulatory discretion. *Law & Policy*, 42: 382-403. <https://doi.org/10.1111/lapo.12158>
- Maor, M. (2007). A scientific standard and an agency's legal independence: which of these reputation protection mechanisms is less susceptible to political moves? *Public Administration*, 85 (4), 961-978.
- Maor, M. (2010). Organizational Reputation and jurisdictional claims: the case of the US Food and Drug Administration. *Governance*, 23 (1), 133-159.
- Maranhão, J. (2016). A revisão judicial de decisões das agências regulatórias: jurisdição exclusiva. In: Prado, M. M. (Org.). *O Judiciário e o Estado regulador brasileiro*. São Paulo: FGV Direito SP, 2016. p.209-230.
- Marković, M., & Gostojić, S. (2018). Open Judicial Data: A Comparative Analysis. *Social Science Computer Review*, 38(3), 295-314.
- McCubbins, M., Noll, R. & Weingast B. (1987). Administrative Procedures as Instruments of Political Control, *Journal of Law, Economics and Organization*, 3 (2), p. 243-277. <https://doi.org/10.1093/oxfordjournals.jleo.a036930>
- McDonald, L. (2004). The rule of law in the “new regulatory State”. *Common Law World Review*, 33 (3), 197-221.
- Mezell, E. (2011). Super deference, the science obsession, and judicial review as translation

- of agency science. *Michigan Law Review*, 109 (5), 733-784.
- Meazell, E. (2011). Presidential control, expertise, and the deference dilemma. *Duke Law Journal*, 61 (8), 1763-1810.
- Mejia, L. (2020). Judicial review of regulatory decisions: Decoding the contents of appeals against agencies in Spain and the United Kingdom. *Regulation & Governance*, Published online 29 January 2020. <https://doi.org/10.1111/rego.12302>
- Meyer, J. W. & Rowan, B. (1977). Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology*, 83 (2), 340-363.
- Monteiro, M., Ravena, N., & Conde, C. (2013). Judicialização da regulação e perda da qualidade do fornecimento de energia elétrica em áreas periféricas. *Revista de Administração Pública*, 47(2), 403-419. <https://doi.org/10.1590/S0034-76122013000200006>
- Morgan, B., & Yeung, K. (2007). *An Introduction to Law and Regulation: Text and Materials*. Cambridge: Cambridge University Press.
- Napolitano, G. (2014). Conflicts and strategies in administrative law. *International Journal of Constitutional Law*, 12 (2), 357-369. <https://doi.org/10.1093/icon/mou017>
- Noll, R. G. (1985). Introduction in Noll, R. G. (Ed.). *Regulatory policy and the social sciences*. Berkeley: University of California Press.
- Nonet, P. & Selznick, P. (2017). *Law and Society in transition: toward responsive law*. New York: Routledge. <https://doi.org/10.4324/9780203787540>
- Osorio, A., & O'Leary, R. (2017). The impact of courts on public management: New insights from the legal literature. *Administration & Society*, 49(5), 658-678. <https://doi.org/10.1177/0095399716682329>
- Peci, A. (2014). Regulação e administração pública in Guerra, S. (org.). *Regulação no Brasil: uma visão multidisciplinar*. Rio de Janeiro: Ed. FGV.
- Piccioletto, S. (2017). Regulation: managing the antinomies of economic vice and virtue. *Socio & Legal Studies*, 26 (6), 676-699. <https://doi.org/10.1177/0964663917729873>
- Pierce, R. J. (2011). What do the studies of judicial review of agency actions mean? *Administrative Law Review*, 63(1), 77-98.
- Popelier, P. (2012). Preliminary comments on the role of courts as regulatory watchdogs. *Legisprudence*, 6 (3), p. 257-270. <https://doi.org/10.5235/17521467.6.3.257>
- Posner, R. (2010). Regulation (Agencies) versus Litigation (Courts): An Analytical Framework. In Kessler, D. (ed.), *Regulation vs. Litigation: Perspectives from Economics and Law*, Chicago: University of Chicago Press.
- Prado, M. (2012). Bureaucratic Resistance to Regulatory Reforms: contrasting experiences in Electricity and Telecommunications in Brazil. In Dusbash, N. & Morgan, B., *The Regulatory State of the South*, Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199677160.001.0001>
- Prado, M. (2016). Introdução in Prado, M. (Org.). *O Judiciário e o Estado regulador brasileiro*. São Paulo: FGV Direito SP.
- Randolph, G. & Fetzner, J. (2018). Regulatory interpretation: regulators, regulated parties, and the courts. *Business and Politics*, 20 (2), 301-328.

- Ramalho, B. (2016). A interface institucional entre a ANS e o Poder Judiciário: análise de acórdãos sobre a cobertura de emergências médicas em planos de saúde. *Revista de Direito Sanitário*, 17 (1), 122-144. <https://doi.org/10.11606/issn.2316-9044.v17i1>
- Ramos, M., Lima, M. & Amaral-Rosa, M. (2019). IRAMUTEQ Software and Discursive Textual Analysis: Interpretive Possibilities in Costa, A., Reis, L., Moreira, A. (eds.) *Computer Supported Qualitative Research: new trends on qualitative research*. Springer. <https://doi.org/10.1007/978-3-030-01406-3>
- Ratinaud, P. (2014). IRAMUTEQ: Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires – 0.7 alpha 2. Retrieved from: <http://iramuteq.org>.
- Revesz, R. L. (2017). Cost-Benefit Analysis and the Structure of the Administrative State: The Case of Financial Services Regulation. *Yale Journal on Regulation*, 34 (2), p. 545-594. <http://dx.doi.org/10.2139/ssrn.2733713>
- Richardson, G. (2004). Impact studies in the United Kingdom in Hertogh, M., Halliday, S. (eds.) *Judicial review and Bureaucratic impact*, Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511493782.001>
- Rowley, T. J. (1997). Moving beyond dyadic ties: a network theory of stakeholder influences. *Academy of Management Review*, 22 (4), 887-910.
- Sampaio, P. & Wada, R. (2016). A regulação e o Judiciário: o caso do setor de eletricidade in Prado, M. (Org.). *O Judiciário e o Estado regulador brasileiro*. São Paulo: FGV Direito SP.
- Schauer, F., & Zeckhauser, R. (2010). “The trouble with cases” in Kessler, D. (ed.), *Regulation vs. Litigation: Perspectives from Economics and Law*, Chicago: University of Chicago Press.
- Schmidt, P. (2004). “Law in the age of governance: regulation, networks and lawyers” in Jordana, J., Levi-Faur, D. (eds.), *The Politics of regulation: institutions and regulatory reforms for the age of governance*, Cheltenham: Edward Elgar. <https://doi.org/10.4337/9781845420673>
- Schmidt, P. (2005). *Lawyers and Regulation: the politics of the administrative process*. Cambridge: Cambridge University Press.
- Scott, C. (2001). Analysing Regulatory Space: Fragmented Resources and Institutional Design. *Public Law*, Summer, 329–353.
- Scott, W. R. & Meyer, J. W. (1991). The organization of societal sectors: propositions and early evidence in Powell, W. W. & DiMaggio, P. J. (Ed.). *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press.
- Seade. (2019). Participação do Produto Interno Bruto paulista no Brasil, segundo as óticas de produção e da renda [Data file]. Retrieved from: <https://www.seade.gov.br/produtos/pib-anual/>
- Selznick, P. (1985). Focusing organizational research on regulation in Noll, R. G. (Ed.). *Regulatory policy and the social sciences*. Berkeley: University of California Press, 1985.
- Shavell, S. (1995). The appeals process as a means of error correction. *Journal of Legal Studies*, 24 (2), 379-426. <https://doi.org/10.1086/467963>.
- Shleifer, A. (2010). “Efficient Regulation” in Kessler, D. (ed.), *Regulation vs. Litigation: Perspectives from Economics and Law*, Chicago: University of Chicago Press.

- Short, J. (2012). The political turn in American Administrative Law: power, rationality, and reasons. *Duke Law Journal*, 61, 1811-1881.
- Silva, R; & Costa Júnior. A. (2011). Judiciário e política regulatória: instituições e preferências sob a ótica dos custos de transação. *Revista de Economia Política*, 31(4), p. 659-679.
- Silva, J. & Guimaraes, T.A. (2020). Regulatory agencies and courts: interactions between administration and justice. *Cadernos EBAPE.BR*, 18 (3), 512-524, <https://doi.org/10.1590/1679-395120190015x>
- Sunkin, M. (2004). Conceptual issues in researching the impact of judicial review on government bureaucracies in Hertogh, M., Halliday, S. (eds.) *Judicial Review and Bureaucratic Impact*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511493782.001>
- Stryker, R. (1994). Rules, resources, and legitimacy processes: some implications for social conflict, order, and change. *American Journal of Sociology*, 99(4), p. 847-910. <https://doi.org/1086/230366>
- Stryker, R. (2000). Legitimacy processes as institutional politics: Implications for theory and research in the sociology of organizations in *Research in the Sociology of Organizations*, v. 17, Emerald Publishing. [https://doi.org/10.1016/S0733-558X\(00\)17006-5](https://doi.org/10.1016/S0733-558X(00)17006-5)
- Tapia, J. & Cordero, L. (2015). La revisión judicial de las decisiones regulatorias: una mirada institucional. *Estudios Públicos*, 139, 7-65.
- Thiruvengadam, A. & Joshi, P. (2012). Judiciaries as crucial actors in southern regulatory systems: a case study of Indian telecom regulation. *Regulation & Governance*, 6 (3), 327-343.
- Tiller, E. & Spiller, P. (1999). Strategic instruments: legal structure and political games in administrative law. *The Journal of Law, Economics, and Organization*, 15 (2) p. 349-377. <https://doi.org/10.1093/jleo/15.2.349>
- Turner, I. R. (2017). Working smart and hard? Agency effort, judicial review and policy precision. *Journal of Theoretical Politics* 29(1), 1-28.
- Urueña, R. (2012). The rise of the constitutional regulatory State in Colombia: the case of water governance. *Regulation & Governance*, 6 (3), 282-299.
- Verschuere, B., Verhoest, K., Meyers, F. & Peters, B. (2006). Accountability and accountability arrangements in public agencies in Christensen, T & Lægreid (eds.) *Autonomy and regulation*. Cheltenham: Edward Elgar Publishing.
- Vibert, F. (2014). *The New Regulatory Space: reframing democratic governance*. Cheltenham: Edward Elgar. <https://doi.org/10.4337/9781783476756>
- Voigt, S. (2019). *Institutional economics: an introduction*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108573719>.
- Wagner, W. (2010). Administrative Law, Filter Failure, and Information Capture. *Duke Law Journal*, 59, 1321-1432.
- Williamson, O. (2005). The Economics of Governance. *American Economic Review*, 95 (2), 1-18. <https://doi.org/10.1257/000282805774669880>.
- Windholz, E. (2018). *Governing through regulation: public policy, regulation and the law*. New York and London: Routledge. <https://doi.org/10.4324/9781315677286>
- Wright, J. D., & Diveley, A. M. (2013). Do expert agencies outperform generalist judges? Some

preliminary evidence from the Federal Trade Commission. *Journal of Antitrust Enforcement*, 1(2), 82–103. <https://doi.org/10.1093/jaenfo/jns007>.

Zhang, X. (2016). Judicial enforcement deputies: causes and effects of Chinese judges enforcing environmental administrative decisions. *Regulation & Governance*, 10, 29-43.

Zhu, G. (2019). Deference to the Administration in Judicial Review: Comparative Perspectives in Zhu, G. (ed), *Deference to the Administration in Judicial Review*. Switzerland: Springer. <https://doi.org/10.1007/978-3-030-31539-9>.

APPENDIX

1) Interview script

At the beginning of the interview, the researcher presented himself as well as the research objective. The interviewee was informed that it is a study in Public Administration which aims to deepen knowledge of litigation involving decisions of regulatory agencies in Brazil. Interviewee's cooperation was appreciated and authorization to record the interview was requested. Anonymity was guaranteed and it was made clear that there were no "right" or "wrong" answers to the questions.

To assist in the interpretation of the data, in order to analyze any differences in the perception of respondents, some biographical information was also requested (such as professional experience, academic degree and etc.).

1) Please give a summary of your professional career, focusing on your experience in the area of regulation.

Note: For judges, the end of the question was adjusted to "your experience with lawsuits involving regulatory agencies".

2) Have you followed-up (decided, for the judges interviewed) cases involving regulation that were subject to review by the Judiciary? What is your general perception about those cases and about the relationship between agencies and courts?

3) What are the main differences in focus regarding courts and agencies in litigation in regulatory matters?

4) What should be the judge's role in regulatory litigation? How do you perceive the role of the judge in the evaluation of regulatory issues and regarding technical-administrative choices in the judicial decision-making process?

5) Was there, in your opinion, any situation in which courts should have assumed a posture of self-restraint in regulatory litigation? If so, could you give examples?

6) Would there be a situation in which courts should assume a more prominent role in cases involving regulatory litigation? If so, could you give examples?

7) In your opinion, how could judges and courts contribute to the improvement of regulatory decisions and policies?

8) Please describe your perception of possible conflicts between the legal rationality and technical-administrative rationality in cases involving regulation.

9) How do you assess the degree of success of the agencies in convincing the Judiciary regarding their regulatory decisions? What aspects would you highlight for achieving greater success in this process of persuasion?

10) We are reaching the end of our interview. Is there any other aspect that you would like to address that was not covered in the previous questions? Feel free to add any information you consider relevant.

2) Coding analysis

The coding analysis involved a careful reading of the judicial rulings in order to make adequate inferences and a proper classification of the decisions in relation to the coding units (subjects of court ruling or grounds of the decision). As the appeal courts' rulings always have standard elements, it was searched for evidence in the following parts related to the categories that guided the analysis:

- a) **Heading:** Contains the core information needed to identify the main characteristic of the case.
- b) **Case summary:** Provides key legal concepts and terms covered in the decision.
- c) **Disposition:** the final determination of the matter by the appeal court.

In this sense, all the parts above were scrutinized in order to guarantee valid inferences and classification of the decisions. The table A1 shows the words that were searched in the parts of the judicial rulings mentioned above. Taking into account the criteria presented at the table, it was possible to classify and group cases together into the desired categories more objectively, by reducing the margin of interpretation for the coder.

Table A1: Criteria of classification of the court rulings

Coding unit	Categories	Evidence to find in the text (words related to)
Subjects of court ruling	Sanction	Fines, infringements, and infraction notes and reports.
	Norm	Agencies' norms, ordinances, resolutions
	Supervision	On-site inspection and surveillance acts, as well as agencies' standards and registration requirements.
	Price-setting	Tariffs and controlled prices.
	Market	Authorizations or licenses involving market entries or barriers, as well as the enactment of special inspection regimes in private entities.
	Procedural	Subpoenas, costs, nullities, lack of action, legitimacy to be on the passive side and decisions rejecting the complaint on formal aspects.
Grounds of the decision	Rule of Law	Illegality, jurisdictional incompetence; legal bans; violation of the law, limitation periods.
	Fundamental Rights	Violations of basic liberties and rights, (lack of) proportionality and equity, unfairness and abuse of power.
	Policy rationality	Assessments by the court regarding the agency reasoning and to the application of its bureaucratic discretion. Examples: the court acknowledges or refutes the merits of agencies decisions aiming at safety, economic or technical issues; the court reviews an agency policy alleging that it oversteps agency's legal missions; the court ruling brings an assessment of the agencies' assignments regarding to the case under revision; the decision reaffirms an agency policy highlighting the quality of agency reasoning.