

Innovating through a mature sector? A comparative analysis of regulatory agencies of highways in Brazil, Colombia and Chile*

Inovando por meio de um setor maduro? Uma análise comparativa das agências reguladoras de rodovias no Brasil, Colômbia e Chile

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ABSTRACT

This paper analyzes the institutional frameworks underlying highway concession programs in Brazil, Colombia, and Chile. The analysis is motivated by a widely held assumption, especially in Latin America, that independent regulatory agencies are key to promoting stable infrastructure policies, insulating decisions from political shifts, and ensuring technical competence. This paper tests this assumption by comparing how institutional arrangements differ across the three countries. Section 2 explains the reasons for selecting Brazil, Chile, and Colombia for making this comparison. Section 3 maps the institutional configurations of each country's road sector, identifying key points of convergence and divergence. Section 4 offers concluding reflections.

KEYWORDS

infrastructure — concessions — regulatory agencies — administrative organization

RESUMO

Este artigo analisa os arranjos institucionais que sustentam os programas de concessão de rodovias no Brasil, na Colômbia e no Chile. A análise parte de uma suposição amplamente difundida, especialmente na América Latina, de que agências reguladoras independentes são fundamentais para promover políticas estáveis de infraestrutura, blindar decisões contra mudanças políticas e assegurar competência técnica. O artigo testa essa hipótese ao comparar como os arranjos institucionais diferem entre os três países. A Seção 2 apresenta a justificativa para a escolha de Brasil, Chile e Colômbia para a análise comparativa. A Seção 3 mapeia os pontos de convergência e divergência. Por fim, a Seção 4 apresenta reflexões finais.

PALAVRAS-CHAVE

infraestrutura — concessões — agências reguladoras — organização administrativa

1. Introduction

The Latin American countries have learned how to structure concessions and PPPs contracts mainly through highways projects, even though the instrument has nowadays been applied by virtually any type of public service, assets or enterprises¹ backed by quite successful level of legitimacy in any spot of the political spectrum.² The road sector is, by far, a consolidated³ and mature sector, with long-standing concession contracts that brought about intense investments,⁴ sustainable bankability and solutions for highway users, such as free flow technology.

¹ In Brazil, the recent concessions encompass not only traditional areas like transportation but also extends to parks and forests. Through initiatives supported by entities such as International Finance Corporation and BNDES, these efforts aim to enhance public access and ensure sustainable management of natural and urban assets. In Colombia, the focus has been primarily on transportation infrastructure, with the launch of the 4th and 5th Generation Concessions (4G and 5G). The 4G program, initiated in 2014, completed eight of its 29 projects and reached a 75% completion rate by mid-2023. The subsequent 5G program, launched in 2020, broadens the scope to include inter-modal transport projects like railways, airports, and river navigability, encompassing 22 initiatives. Meanwhile, Chile's concession strategy showcases a diversified portfolio under the 2019-2024 schedule, targeting sectors such as transportation, airport connectivity, water resource management, and social infrastructure, including a hospital concession. For more information, please consult: <https://hubdeprojetos.bndes.gov.br/pt/setores/Parques>, <https://www.tradecommissioner.gc.ca/colombia-colombie/market-reports-etudes-de-marches/0007359.aspx?lang=eng> and <https://blog.investchile.gob.cl/public-concession-system-chile>. Accessed on: Nov. 26, 2024.

² Specialized literature demonstrates that the concessions agenda is already present in governments across the political spectrum and in various states. According to Sandro Cabral, professor of Strategy and Public Management at Inspira, "*this is not a right-wing or left-wing issue; the data clearly demonstrates this. It is a tool widely employed to address the population's demands*". For further information, please see: <https://valor.globo.com/empresas/noticia/2024/10/02/concessoes-e-projetos-de-ppps-de-prefeituras-tem-aumento-de-59.ghtml>. Accessed on: Nov. 26, 2024.

³ Marco Aurelio de Barcelos, the president of the Brazilian Association of Concessionaires of Highways, stated that the Brazilian Road Sector is a product of exportation of the Brazilian economy, given its level of maturity and sophisticated measures. Indeed, he explained that, if in the past the Brazilian executives learned from the international guidelines how to structure a concession, these guidelines are nowadays out of date, given the innumerable innovations the sector brought about. The note was made at the event held by the Association of Lawyers of the State of São Paulo, on November 13th, 2024.

⁴ For instance, at the federal level, according to information provided by ANTT, there are over 25 highway concessions, totaling approximately 14,100.21 km, with more than BRL 7 billion invested. For more information, see: <https://www.gov.br/antt/pt-br/assuntos/rodovias/informacoes-gerais>. Accessed on: Nov. 26, 2024.

At the state level, São Paulo State Highway Concession Program was established in March 1998. Since then, up to March 2021 (the date of the latest consolidated survey by the State), over 11,200 kilometers of highways have been granted to 20 concessionaires, with BRL 1.04 billion invested in highway construction and maintenance. Since that survey, additional

Brazil, Chile and Colombia have historically had strong partnership programs and keep betting on the model to expand the infrastructure network. How they have done so is the general inquiry that originates this research, which will pursue an administrative law and institutional comparative perspective. Conscious about the numerous variables that may have an impact on the historical process of conception and implementation of these infrastructure programs, the limited insights from this paper intend rather to shed light on the features of a customized institutional apparatus than to propose an exhaustive explanation. The background hypothesis of this paper is that innovation flows more easily within a context of technical capacity, political resilience and strong long-term horizon of contractual execution and monitoring. According to this hypothesis, regulatory agencies would be the necessary apparatus of a *program* of concessions and partnerships. That is, we are not talking about a single project that may be well structured and eventually enjoy a successful bid, but about countries that have focused on a strategy of a set of projects to expand the network of highways managed by private partners.

A program, instead of aleatory single projects, permits a continuous learning process through political cycles,⁵ including the incrementation of regulatory mechanisms from learning lessons that emerge in ongoing contracts. In addition to that, a partnership program facilitates the formation of a market. This means that the business development departments of infrastructure companies have the proper incentives to allocate time and resources to get involved in a learning process and prepare themselves to gradually study the projects and eventually make the decision of participating in a bidding process. More than that, a program structures a context that mobilizes a diverse profile of bidders because it develops a long run competition, instead of a one-shot opportunity, as the latter tends to favor the insiders and ordinary players. For example, foreign companies or financial players, such as sovereign⁶ or private

significant projects have expanded the State's portfolio, including, for example, the concession of the Northwest Paulista Lot, covering 600 km and involving investments of BRL 13.9 billion in construction and operations over a 30-year period, and the Litoral Paulista Lot, with a length of 213 km, an expected investment of BRL 4.3 billion, and a 30-year term. For more information, see: <http://www.artesp.sp.gov.br/Style%20Library/extranet/rodovias/programa-de-concessoes.aspx>. Accessed on: Nov. 26, 2024.

⁵ This is a very classic idea of continuity of the Weberian bureaucratic administration, and it is not the goal of this paper to debate the issue. More precisely, we enquire whether stable bureaucratic administrations are more adequate to put forward innovation.

⁶ For instance, a consortium formed by the investment manager Pátria Investments and Singapore's sovereign wealth fund GIC won the 2019 auction for the Piracicaba-Panorama

equity funds,⁷ need time and a long-term pipeline of transactions to spend resources to study the projects, understand the local market⁸ and eventually be part of the bidder's club.

Given a (once again) time of contestation of the regulatory agencies in Latin America,⁹ the goal of this paper is to understand the similarities and

highway concession (known as Pipa). Since then, the consortium has been responsible for managing one of the country's largest concessions in terms of length, for a period of 30 years. Available at: <https://valor.globo.com/empresas/noticia/2020/01/09/patria-e-gic-vencem-leilao-de-pipa-com-oferta-de-r-11-bilhao.ghtml>. Accessed on: Nov. 26, 2024.

⁷ Pátria Investments, an investment fund manager that has submitted proposals in various highway concession auctions, currently holds two contracts with the State of São Paulo (Entrevias in 2017 and PiPa in 2019) and one with the federal government (Lot 2 of Paraná highways, with the contract signed in 2023). Additionally, the infrastructure investment fund Via Appia is responsible for managing the northern section of the Rodoanel Mário Covas in São Paulo, with the contract signed in 2023.

⁸ The example of the French group Vinci is sound. Recent events underscore Vinci's commitment to Brazil. In previous years, the group was known in the Brazilian market for its involvement in various concession bids, either through auctions or direct transactions, primarily in the airport sector. More recently, however, the group has also shown interest in the highway sector, both at the federal level and within the State of São Paulo.

In May 2023, Vinci acquired 55% of the control of the concessionaire Entrevias, which was previously fully owned by Patria Investments, now retaining 45% of the concessionaire's control. For more information, see: <https://valor.globo.com/empresas/noticia/2023/05/11/vinci-entra-em-bloco-de-controle-da-entrevias.ghtml>. Accessed on: Nov. 26, 2024.

In September 2024, the French company has done its first bid in highways and successfully acquired the Rota dos Cristais (BR-040/GO/MG) concession - a 30-year federal contract involving over BRL 12 billion in investments, including BRL 6.495 billion in Capex and BRL 5.601 billion in Opex. For more information, see: <https://www.gov.br/transportes/pt-br/assuntos/noticias/2024/09/VINCI-Highways-SAS-vence-disputa-por-Rota-dos-Cristais-no-leilao-mais-concorrido-do-ano>. Accessed on: Nov. 26, 2024.

⁹ Over two decades after the establishment of regulatory agencies in Brazil, evidence suggests that political resistance to technical and autonomous regulation persists. Recent developments, particularly in 2024, have raised significant concerns about the erosion of these agencies' independence. In 2020, the then-Governor of São Paulo, the state with Brazil's most successful concessions program and two pivotal regulatory agencies, introduced a controversial legislative proposal. The "Fiscal Adjustment and Public Accounts Rebalancing" bill (PL 529/2020) included a provision without substantive justification, stipulating that processes to be deliberated by the collegiate boards of state regulatory agencies that may impose financial burdens or obligations on the State of São Paulo must first be submitted for evaluation by the Granting Authority, the Secretariats of Finance and Planning, and the Secretariat for Projects, Budget, and Management. This initiative sparked opposition from legal and regulatory experts, including Carlos Ari Sunfeld, who argued that it posed a direct threat to the agencies' autonomy. The proposal was ultimately withdrawn. For further details, see SUNDFELD, Carlos Ari. *Agências reguladoras estão em risco em São Paulo (Regulatory agencies are at risk in São Paulo)*. 18/08/2020. Available at: <https://sbdp.org.br/wp-content/uploads/2020/08/18.08-Ag%C3%A2ncias-reguladoras-est%C3%A3o-em-risco-em-S%C3%A3o-Paulo-JOTA-Info.pdf>. Accessed on: Nov. 26, 2024.

In 2024, following blackouts in São Paulo that cast doubt on the performance of the National Electric Energy Agency (Aneel), a federal deputy proposed a constitutional amendment (PEC) granting Brazil's lower house exclusive oversight over regulatory agencies. This initiative, if enacted, would centralize power and potentially undermine agency independence. More

differences of the institutional framework that has backed the highways private participation program in the three countries. The interest of the research is to map the institutional design within the context of customized and long-term contracts. Our inquiry derives from a prevailing argument around the world, including in Latin America: regulatory agencies would be the necessary independent administrative body to promote long-term infrastructure policies, resilience to cyclical changes at the political arena and technical capacity to increment the concerned sector.¹⁰ The creation of regulatory agencies has largely been deemed as a fundamental governmental signal to ensure confidence before the investors, by performing as a shield against expected fluctuations in political decision-making and an equidistant actor between public and private interests in long term-contracts.

To accomplish our research goal, in **item 2**, we will outline the reasons why Brazil, Chile, and Colombia are sufficiently similar to make a comparison meaningful, yet sufficiently different to make it interesting. This includes, for example, the implementation or preparation for the implementation of free-flow technology in road concessions, to varying extents, in each country. In **item 3**, we will map similarities and differences of the institutional frameworks supporting the road sector in the three countries. We will pursue the following three specific questions to structure the comparative analysis, which may shed light, in the case of public procurement, on the extent to which the common argument holds that independent regulatory agencies are necessary for the design and success of long-term public policies.

First, which institutions serve as the backbone of the concession road programs? Are these institutions regulatory agencies or other types of entities? *Second*, if regulatory agencies exist, are the directive boards of these regulatory agencies nominated for mandates and therefore unsusceptible to be

details are available here: Victor Irajá, CNN Brasil: <https://www.cnnbrasil.com.br/politica/waack-a-ofensiva-do-governo-contra-as-agencias-reguladoras/>. Accessed on: Nov. 26, 2024.

Another pressing issue involves federal proposals to restructure Brazil's regulatory framework. Among the measures under discussion are the establishment of a "super agency" to oversee existing regulatory bodies and criticism of fixed director mandates that do not align with the presidential term. For additional insights, refer to: <https://g1.globo.com/politica/noticia/2024/10/19/ao-falar-de-apagao-em-sp-lula-critica-critica-mandatos-de-diretores-nas-agencias-reguladoras-eu-nem-conheco-as-pessoas.ghtml>. Accessed on: Nov. 26, 2024.

¹⁰ This question is examined by various authors in different contexts, especially in developing countries. For this, see: For this, see: DJANKOV, Simeon; MCLIESH, Caralee; RAMALHO, Rita. Regulation and growth. *Economics Letters*, v. 92, n. 3, p. 395-401, 2006; NICOLETTI, Giuseppe; SCARPETTA, Stefano. Regulation, productivity and growth: OECD evidence. *Economic Policy*, v. 18, n. 36, p. 9-72, 2003.

fired by the political body?¹¹ *Third*, are the regulatory agencies the last resort of an administrative decision in the sector? From the result of the research, we may find elements to assess the usual rhetoric concerning regulatory agencies. That is, we may find inputs about the background hypothesis according to which innovation flows more easily under a context of technical capacity and a strong long-term horizon of contractual execution and monitoring. Finally, in **item 4**, we present our conclusions.

2. Methodology: why Brazil, Chile and Colombia? Picking up some variables

It is always imprecise to compare, and therefore hard to do so.¹² The enormous diversity of variables that play a role in local contexts, the cultural features and formal and informal patterns that drive institutional behavior, not to mention the political contingent priorities, may be appointed as a couple of challenges to legitimate a comparative research enterprise.¹³ However, this is a necessary method to enable analytical reasoning that considers a dynamic perspective of institutional functioning. A step back, by allowing a certain distance to observe this institutional functioning, may help us to challenge

¹¹ We are aware of the potential conflicts between the regulatory agencies and the political body. These conflicts will happen, and other researchers have focused on discussing how to increase their legitimacy, such as: REIS, Tarcila. Dependence or independence of regulatory agencies in Brazil? A contribution to the legitimacy study of regulatory agencies. *Revue Française d'Administration Publique*, v. 14, n. 3, p. 803-816, 2012; PRADO, Mariana Mota. A comparative perspective of the presidential domain theory: the relationship between the Executive Power and regulatory agencies in Brazil. *Revista de Estudos Empíricos em Direito*, v. 3, n. 2, 2016.

¹² Comparison can be viewed both as a cognitive activity and as a routine aspect of daily life. Comparative studies, in a broad sense, are inherently complex and involve a combination of different methods, which can — and should — vary depending on the object of study. This is why there is an extensive body of literature on comparison methods which points out these difficulties and points of attention that must be observed by each researcher. For instance: COLLIER, David; MAHON, James E. J. Conceptual “stretching” revisited: adapting categories in comparative analysis. *American Political Science Review*, v. 87, p. 845-855, 1993; BENNETT, Andrew; ELMAN, Colin. Qualitative research: recent developments in case study methods. *Annual Review of Political Science*, v. 9, p. 455-476, 2006; MAHONEY, James. Qualitative methodology and comparative politics. *Comparative Political Studies*, v. 40, p. 122-144, 2007; RAGIN, Charles C. *The comparative method: moving beyond qualitative and quantitative strategies*. Berkeley: University of California Press, 1987.

¹³ For instance, it has been observed that any definition of processes or institutions is unlikely to be universally applicable across different cases, as its meaning is deeply contingent on the specific context in which these processes and institutions are embedded (ROSE, Richard; MACKENZIE, W. J. M. Comparing forms of comparative analysis. *Political Studies*, v. 39, n. 3, p. 446-462, 1991.).

our alleged certainties and elaborate them from a larger perspective. We do not search for causal relations; we do search for insights to renew or expand the toolbox available to test the institutional functioning aligned to the infrastructure policy in place.¹⁴

Brazil, Chile and Colombia are sufficiently similar to render a comparison sound and sufficiently different to render a comparison interesting.

First, the three Latin American countries have shared a historically consistent strategy towards public private partnership from the late 90s onwards, by abandoning a centralized State, fully responsible for launching investments and delivering public services to society, and making efforts to implement a rather regulatory State, derived from State Reform processes. State Reform not only encompass a set of transformations about the internal functioning and organization of the State's administrative machine. It is a deeper phenomenon that has altered the external dynamic of the State with private actors. State Reform has stretched out existing porous boundaries vis-à-vis private participation in the provision of public services¹⁵. From fiscal crises to value-for-money motivations to justify private participation to overcome infrastructure deficit and contemplate social demands, the reasons for pushing contractual solutions have spread and circulated to governments of different political colors in all three countries.

Second, the focus on private investments has been translated into concerned laws, even though at that time all the countries had already had experience in concessions. That is, it was not laws that inaugurated the history of concessions in Latin American countries,¹⁶ but they certainly were fundamental milestones to foment and diffuse the instrument of a new and clear strategy to bring about highways infrastructure public policy. In Colombia,

¹⁴ In the context of infrastructure policy analysis, international literature offers a variety of frameworks and insights that can be valuable when assessing institutional functioning. A key theme explored is the evolving role of public-private partnerships (PPP) and decentralized governance mechanisms in financing and delivering infrastructure projects. For example, the UK has emphasized devolution of power to local authorities through initiatives like the Local Growth agenda, where local entities are encouraged to take on more responsibility for infrastructure financing and development, including the adoption of innovative funding mechanisms such as the Business Rate Supplement or Tax Increment Financing (TIF). O'BRIEN, Peter; PIKE, Andy. *The governance of local infrastructure funding and financing. Infrastructure Complexity*, v. 2, n. 3, 2015.

¹⁵ For more information, please see: REIS, Tarcila. *Administrative policy law: a comparative institutional analysis of state reform in Chile, Brazil, and Argentina*. Tese (doutorado em ciência política) — Sciences Po, Paris, 2013.

¹⁶ As explained in item II of this paper.

in 1993, law 80 regulated concession model under this contracting-out state strategy, as long as law 1,508 of 2012, which implemented the public-private partnership, by attributing to the private partner large flexibility to design, construct and maintain services under a 30-year contract.

In Brazil, law 8,987 was promulgated in 1995 and, after only punctual adjustments, have remained resilient so far.¹⁷ Also in Brazil, another law was promulgated in 2004 to then regulate the so-called public-private partnerships. We are talking about law 11,079, which has allowed the country to design long term contracts with private actors that would also count on public resources, exclusively or jointed to tariffs, and made progress regarding risk allocation and other sound contractual features. The public-private partnerships were in the end the *special concessions*, which represented the consistency of the strategy. That is, we might have to increase the sample of characteristics and customize the model, but private participation for infrastructure was a clear direction legally speaking.

Third, all the three countries are deemed to have quite successful highways public private partnerships, if one looks at the investments generated, the increasing quality and safety of the road networks, based on the logic of *programs* (not sparse projects). The numbers naturally vary, given the strong differences of size¹⁸ of the territories and related populations, in addition to the economic leverage,¹⁹ among the three countries, but all of them present concrete data to show consistent consolidation of the variables.

¹⁷ In this regard, Egon Bockmann Moreira's book stands out as one of the most comprehensive works on the subject in Brazil. In 2024, the author updated the book, now in its third edition, which examines the full lifecycle of concession contracts - encompassing conception, bidding, execution, and contract termination. As highlighted in its presentation, the book acknowledges the enduring resilience of Law 8,987/1995, which remains central to the regulatory framework. Despite the passage of time and evolving regulatory contexts, as demonstrated throughout the chapters of the book, this law continues to serve as a robust and essential foundation for the legal structure governing concessions in Brazil (MOREIRA, Egon Bockmann. *Direito das concessões de serviço público*. 3. ed. Belo Horizonte: Fórum, 2024. Available at: <https://www.forumconhecimento.com.br/livro/L4472>).

¹⁸ Brazil, with an expansive territorial area of approximately 8.515 million square kilometers, ranks as the fifth largest country in the world. Its population, estimated at around 216 million people in 2024, makes it the sixth most populous country globally. In comparison, Chile, a narrow but long country in Latin America, covers an area of 756,102 square kilometers. Despite its smaller size, Chile has a population of about 19.4 million people as of 2024. Meanwhile, Colombia, with a territorial area of 1.142 million square kilometers, has a population of approximately 52.1 million people in 2024. For more information, please consult: The World Factbook. Explore All Countries. Available at: <https://www.cia.gov/the-world-factbook/countries/>. Accessed on: Nov. 26, 2024.

¹⁹ According to data from the most recent World Economic Outlook report by the International Monetary Fund (IMF), the economies of Brazil, Chile, and Colombia display distinct sizes and

Brazil has been praised as one of the largest and most successful private participation in infrastructure programs of the world and certainly has learned how to push large scale programs through the road sector.²⁰ Since the late 90s, we have seen an incremental performance of its road concessions programs, specially led by the State of São Paulo and then replicated by the Federal Government and by other subnational units. In 2016, when the country faced a restriction to liquidity and most of its traditional infrastructure players were discussing the implications of the Lava Jato operation²¹, the State of São Paulo decided to transform its regulatory patterns towards a diversity of bidders and higher internationalization of its program.²² The financial compromising

growth patterns. Focusing specifically on GDP, Brazil, the largest economy in South America, has a Gross Domestic Product (GDP) of approximately USD 2.13 trillion, making it the largest in Latin America. Colombia ranks fourth in the region with a GDP of USD 363.84 billion, while Chile follows closely in fifth place with a GDP of USD 344 billion. For more information, see: <https://www.imf.org/en/Publications/WEO>. Accessed on: Nov. 26, 2024.

²⁰ For example, in 2019, São Paulo's Centro Oeste highway concession had been highlighted internationally in P3 Awards, which recognize excellence in public-private partnerships. For more information, please see: <https://www.saopaulo.sp.gov.br/sala-de-imprensa/release/p3-awards-sao-paulo-vence-como-melhor-modelo-financeiro-de-concessao>.

²¹ Lava Jato Operation was a series of investigations carried out by the Federal Police of Brazil (PF), which executed over a thousand search and seizure warrants, temporary and preventive arrest warrants, and coercive conducts, aiming to uncover a money-laundering scheme that moved billions of reais in bribes, referred to as the "Petrolão." The operation began on March 17, 2014, and included 80 operational phases, among others, during which more than a hundred people were arrested and convicted. The operation was controversial and concluded on February 1, 2021.

As appointed by Raquel Pimenta, Brazil has experienced numerous investigations and corruption cases since its re-democratization, but none seem to compare to the Lava Jato. When Paulo Roberto Costa signed his collaboration agreement as Petrobras' director in 2014, it was not clear what Lava Jato would become, nor its reach within the elite or its political and economic consequences. Since then, these series of investigations has expanded through numerous phases, with decentralized task forces in states like Rio de Janeiro and São Paulo, leading to criminal, civil, and administrative repercussions. It has implicated the country's political and economic elite in a narrative that touches on a variety of topics, including corruption in state-owned companies, political-party financing, money laundering across multiple layers, cartels in public bidding, and the roles and limits of the Public Prosecutor's Office and Judiciary, among others. The facts and events of Operation Lava Jato, in summary, reveal significant challenges related to regulating public-private relationships in Brazil. Some of the most important Brazilian companies, both private and public, were involved in corruption cases, with a portion of them linked to transnational bribery. For more information, please see: PIMENTA, Raquel. *A construção dos acordos de leniência da lei anticorrupção*. Tese (doutorado em direito) — Universidade de São Paulo, São Paulo, 2020.

²² In order to accomplish this goal, the State of São Paulo hired the International Finance Corporation, which is part of the World Bank Group, which played the role to propose and consolidate the feasibility studies and market sounding of the modeling process. To have an overview of the process and innovations: CAMACHO, Frederico Turolla; RODRIGUES, Bruno de Castro Lyra. *Regulação econômica de infraestruturas: como escolher o modelo mais adequado?* Rio de Janeiro: BNDES, 2022.

of the bidding criteria, improvements in early termination clauses, possibility of direct agreement and liquid compensations from the revenues of the project itself are just a couple of examples²³ that put the whole program to another level of technical quality and attractiveness. Since then, the Federal Government and other subnational states have taken the same path and been awarded on several boards. More than that, the result of the competitive bidding process has meant more than 20,000 km under private management, only considering São Paulo and the Federal Government's Road network.²⁴

The years 2023 and 2024 have been significant for the Federal Government in Brazil, marked by the launch of new projects and other important advancements in the infrastructure sector. In 2023, the Ministry of Transport introduced a new road concession policy aimed at standardizing project frameworks to enhance legal certainty and increase the attractiveness of transport infrastructure tenders. Under this new model, two highway lots in Paraná were auctioned in 2023, with plans for 13 more tenders in 2024. Collectively, the 2024 auctions are expected to generate approximately R\$ 122 billion in private investments in federal highways over the duration of the contracts.²⁵

Additionally, in 2024, the Brazilian Government oversaw the first federal-level re-bidding process: the tender for BR-040/MG, a logistical corridor in the State of Minas Gerais, where highways are still largely managed by public authorities. In Brazil, re-bidding involves the amicable termination of an existing partnership agreement and the execution of a new contractual arrangement for the project.²⁶ This process, governed by Federal

²³ For a description of the mechanisms and the regulatory challenges that have been overcome, see: REIS, Tarcila. Tripartite agreement: addressing the challenges of project financing in concessions and public-private partnerships in Brazil. In: CUNHA FILHO, Alexandre Jorge Carneiro da et al. (Ed.). *Rights, institutions, and public policies: the role of jusidealism in state formation*. São Paulo: Quartier Latin, 2017. p. 123-145; Camacho e Rodrigues, *Regulação econômica de infraestruturas*, op. cit.

²⁴ As summarized by ANTT and Artesp (<https://www.gov.br/antt/pt-br/assuntos/rodovias/informacoes-gerais#:~:text=A%20ANTT%20administra%20atualmente%202026,totalizando%20aproximadamente%2014.100%2C21%20km> and <http://www.artesp.sp.gov.br/Style%20Library/extranet/noticias/noticia-detalhes.aspx?id=1178>). Accessed on: Nov. 26, 2024.

²⁵ Available at: <https://www.gov.br/antt/pt-br/assuntos/rodovias/concessionarias/historico>. Accessed on: Nov. 26, 2024.

²⁶ "The first re-bidding of a federal asset in the country, the concession for BR-040/MG, will bring greater comfort and safety from Belo Horizonte to Juiz de Fora. It was also the first highway concession of the year and the most competitive since 2018. The Infraestrutura MG Consortium, part of the EPR group, offered an 11.21% discount on the minimum toll rate and will invest R\$ 8.7 billion in new construction and operational services". Available at: <https://www.gov.br/transportes/pt-br/assuntos/noticias/2024/04/br-040-mg-e-leiloadas-garantia-de-investimentos-entre-belo-horizonte-e-juiz-de-fora>.

Law 13,334/2016, applies not only to the road sector but also to airports and railways, serving as a mechanism for restructuring infrastructure projects that face challenges.

Since 1993, Colombia has clearly implemented the strategy of pursuing five road sector programs that comprise 44 projects and increased the scale of the network under private management from 2.985km in 1998 to 7.844km in 2022. This meant more than \$ 70 billion in investments to improve the infrastructure,²⁷ among highways, bridges and viaducts, and the intention to generate more than 600 thousand new jobs only from the fifth level of the program (5G).

In Chile, concessions were, at first, a strategy implemented by the center-left coalition of political parties that has governed the country since the return to democracy in 1990 (*Concertación de partidos por la democracia*), to address the deficit in transportation infrastructure, including highways, airports, and ports. Based on the build-operate-transfer (BOT) contract model, the program involved transferring responsibility to the private sector to finance, build, and operate public infrastructure projects for a set period, typically between 10 and 30 years. In 1991, the *Reglamento del D.F.L 164* was approved to regulate the execution and maintenance of public works funded by the State under the concession system, which were previously established in Article 87 of decree 294 of 1984, issued by the Ministry of Public Works (*Ministerio de Obras Públicas*). The specialized literature indicates that the *Reglamento del D.F.L* is quite flexible, allowing substantial adaptability in structuring concession contracts to meet the specific needs of each project.

Chile's efforts to address its infrastructure shortage, especially in the 1990s, resulted in an incremental process of enhancing its legal regulatory framework. This period marked a transformative wave of large-scale infrastructural development in Chile, driven by a post-authoritarian commitment to growth with equity. Celebrated as progressive neoliberalism, this model signaled Chile's political commitment to market-led development while incorporating targeted state-led resource distribution and public interventions. One of its key features was the adoption of public-private partnerships (PPPs), particularly in the form of franchises, as the preferred mechanism for implementing public works, most notably highways.²⁸

²⁷ Available at: <https://www.ani.gov.co/proyectos-ani-peajes>. Accessed on: Nov. 26, 2024.

²⁸ SILVA, Enrique R. Deliberate improvisation: Planning highway franchises in Santiago, Chile. *Planning Theory*, v. 10, n. 1, p. 35-52, 2011. Available at: <https://journals.sagepub.com/doi/abs/10.1177/1473095210386067>. Access on: Jan. 8, 2025.

Specialized literature observes that the success of this program cannot be attributed solely to a market-driven approach to public works. Instead, its effectiveness stemmed from two crucial factors: a tightly structured business model that ensured financial and operational viability, and a strong political will to engage in deliberate improvisation, adjusting plans as needed to address the social dimensions of large-scale projects. This combination of structured planning and adaptive governance was essential in shaping the long-term impact of Chile's infrastructure development. The commitment of the Chilean Ministry of Public Works and its accumulated experience led to the evolution of the concession law, which was first introduced in 1991. Since then, legislation has undergone several modifications, with the most recent being Law 20,410, enacted in 2010, which marks the incorporation of explicit service levels and certain technical standards in the tender term bases, for example.

Finally, the three countries have the potential to offer insights into the hypothesis that innovation thrives in contexts characterized by a long-term perspective on contractual execution and monitoring. This dynamic is exemplified by the adoption of free-flow technology, implemented to varying degrees and in different ways in Brazil, Chile, and Colombia, reflecting a gradual integration of technology aimed at enhancing user safety and comfort.²⁹

In Chile, the implementation of free-flow tolling is advancing rapidly, supported by the government's push to alleviate congestion and enhance traffic flow. The "*Chile sin barreras*" plan seems to play a crucial role in this

²⁹ The free flow system is a tolling method that eliminates the need for physical toll booths by using automatic vehicle identification. This is achieved through the installation of gantries along the highway, which detect vehicles via tags or license plate recognition software. The system aims to more closely align toll charges with actual infrastructure usage by allowing for additional tolling points along the route, thereby reducing the coverage area of each point and making the toll more proportional to the distance traveled.

Rafael Wallbach Schwing and Lucas de Moura Rodrigues explains that: "*The free flow system operates through gantries installed over lanes, automatically and electronically identifying vehicles that pass beneath them without any physical barriers on the road. Vehicles are detected by either radio frequency or optical character recognition cameras: the former captures data transmitted by on-board equipment (OBU, or transponder/TAG), and the latter reads vehicle license plates in motion. Gantries can be positioned at system entrances and exits to track vehicle access points and distances traveled, or fixed along the highway, covering specific sections like traditional toll booths. The key difference is that the free flow system may involve more gantries, thus reducing the coverage area at each toll point*". (SCHWIND, Rafael Wallbach; RODRIGUES, Lucas de Moura. *Implantação do sistema free flow em concessões em curso: riscos e desafios*. In: DAL POZZO, Augusto Neves; ENEI, Vitor Lenza (Coord.). *Tratado sobre o setor rodoviário no direito brasileiro*. São Paulo: Contracorrente, 2022. p. 333-356).

initiative, aiming to remove traditional toll booths on key highways and replace them with electronic toll systems that allow vehicles to pass without stopping. A significant milestone occurred in 2022 with the launch of free-flow tolling at several locations, including the *El Melón Tunnel* in the *Valparaíso* region, which connects *Quillota* and *Petorca*. As part of a broader strategy, other regions, including the *Santiago-Valparaíso* and *Santiago-San Antonio* corridors, have also shifted to full free-flow operations. The government plans to extend this model further in the coming years, aiming to remove barriers from additional toll stations, such as those on the *Nogales-Puchuncaví* route. This expansion reflects Chile's commitment to modernizing its road infrastructure and improving overall efficiency on its highways.

In Brazil, the adoption of the free-flow system has been gradually integrated into new highway concessions of the State of São Paulo. For example, in 2023, the concession contracts for Rodoanel Norte and Lote Noroeste required the concessionaires to install or convert toll booths to the free-flow system after the construction period. This shift eliminates the need for traditional toll booths with physical barriers on these two state-owned assets. Furthermore, the Lote Litoral Paulista concession incorporated the free-flow system from the outset, particularly because the roads in this concession were not previously tolled. The commercial operation of the concession is contingent upon the completion of investments necessary for implementing the free-flow system, as well as the opening of the accounts required for its operation. This includes the Free Flow Account, which is designated to receive funds collected from traffic fines resulting from evasions within the toll system.

This adoption of the free-flow system in the State of São Paulo is not limited to isolated contractual arrangements but reflects a broader public policy. On September 13, 2023, the state, through the State Secretariat for the Environment, Infrastructure and the State Secretariat for Investments and Partnerships, published the Joint Resolution Semil/SPI 2/2023. This resolution establishes the *Siga Fácil SP* Program, designed to promote the implementation of free-flow systems across the state's highway concessions. The program aims to eliminate traditional toll booths, enabling toll charges that better reflect the actual distance traveled on the roads, thereby enhancing traffic flow, improving safety, and reducing pollution and greenhouse gas emissions.

At the federal level, the implementation of free-flow tolling has progressed more slowly. The National Land Transport Agency (*Agência Nacional de*

Transportes Terrestres — “ANTT”) has initiated a regulatory sandbox for the free-flow system and signed an addendum with the concessionaire CCR Rio to implement this toll collection model on an experimental basis. However, the modeling of new contracts launched by ANTT so far has not considered the free-flow technology as part of the baseline scenario for the concession, as seen in the case of the State of São Paulo in the examples mentioned above.

In Colombia, the free flow technology is still a reality to be, even though the positive sides of its implementation have been discussed as a future to be faced. The most recent contracts (5G) do not demand its implementation but refer to it as a risk assumed by the Public Authority, which is the same path we observed in the Brazilian contracts about 5-8 years ago. That is, the contract establishes that, in the case the Public Authority imposes the implementation of “*nuevas tecnologías*” for the collection of tariffs, both the potential excess of costs and the savings will be attributed to the Public Authority.³⁰

In addition to that, clause 8.3 of the contracts prescribes that the amount of money related to the implementation of these new technologies will be presented by the concessionaire to the Public Authority, which will evaluate it and define whether the Concessionaire should go on. Interesting enough, there is the participation of an external actor “*amigable componedor*” to solve eventual controversies concerning the budget proposed by the concessionaire and the one approved by the Public Authority, in addition to doubts about the amount of costs or savings derived from the implementation of the new technology. This means that the contracts in Colombia have not yet incorporated the free flow as part of the project itself, like in Chile and Brazil, but there is a regulatory framework that puts it as a coming future.

3. Comparative analysis: similarities to calm down or differences to disturb?

Which type of institutions have backed the relatively successful transformations in the road sector of the three countries? Are they regulatory agencies, like the diffusion of the Regulatory State prescribed? Does their directive board enjoy a basic level of autonomy, which is the legal

³⁰ The model of the 5G contracts (*Modelo de Concesiones del Bicentenario*) is available at: <https://www.ani.gov.co/transparencia-y-acceso-informacion-publica>. Accessed on: Nov. 26, 2024.

impossibility of getting fired by the political body, apart from very specific and exceptional circumstances? What about the level of binding implications of their administrative decision-making process? Are concessionaires, private partners or users entitled to resort to any other administrative body to complain against the decisions made by these institutions or are they binding as the idealized features of functional autonomy proposed both by scholars and politicians?

3.1 *Steady steps with the same model or institutional transformations?*

Colombia has not one single or linear history about the institutions that backed its program. The mapping of the institutional transformations shows that for virtually every new phase (*generación*) of its road concession program, the country launched a new institutional apparatus to back it. The first phase of the road concession program (*La Primera Generación*) was implemented between 1993 and 1998, which was institutionally supported by the creation of the National Institute of Highways (*Instituto Nacional de Vías — Inviás*), which was a sort of fusion between Ministry of Public Works and the National Fund for Highways. The program kept going and the second and third phases were implemented from the subsequent decade (1999-2010), but the National Institute of Highways was replaced by the National Institute of Concessions (*Instituto Nacional de Concesiones — Inco*) in 2003, which was responsible for the modeling, contracting-out, implementation, monitoring and management of the concession contracts. Another decade onwards and another institutional reform took place. In 2011, the National Institute of Concessions became the National Agency of Infrastructure, which encompasses several transportation sectors.³¹ That is, the institutional design behind the road sector program abandoned a single technical niche and proliferated its functioning towards the sectors of ports, airports and railways.

Compared to Colombia, the Brazilian institutional trajectory behind its road concessions program reveals stronger stability, although similarities concerning the scope might be highlighted. In 1998 and 2000, the eight first

³¹ Available at: <https://www.ani.gov.co/proyectos-ani-modo-carretero>. Accessed on: Nov. 26, 2024.

concession contracts were signed by the Government of São Paulo and in 2002 the Regulatory Agency of Transport (*Agência de Transporte do Estado de São Paulo – “Artesp”*) was created by law 914 and disciplined by decree 46,708 of the same year. Since then, the State of São Paulo has consistently expanded its program and signed 15 new contracts, but always backed up with the same regulatory agency. During more than twenty years, the same institutional design was the reference to the program that has accomplished more than half of the road network under private management and has 8 out of the 10 best highways of the country.³²

Of course, there has been accumulation of experience and several fronts of innovations, but the institutional body was the same. Stability has been precisely an argument towards innovation: people do not waste time trying to understand new institutions or directives and simply focus on the ways to improve projects.³³ Interesting to note that the first legal reform to law 914 is very recent, carried out by law 1,413 of 2024. The new law promotes several innovations that we will discuss later, but towards a further consolidation of the Regulatory State's prescriptions. That is, Artesp is still there, at the same address, with the same name and much more legally empowered. The innovations that conceive the model of the future are actually a bet on the incrementation of the model of the past. It has not changed the route, but simply gotten the route better and safer.

The story at the federal level in Brazil is quite similar, if one looks at the duration and institutional design persistence. The first five road concessions in the federal network were signed between 1994 and 1998 and in 2001 the National Land Transport Regulatory Agency (*Agência Nacional de Transporte Terrestre*) was created by federal law 10,233. Since then, 26 new projects have been conceived, structured, submitted to a bidding process and auctioned under long term contracts. Indeed, in 2019, the Federal Government promulgated a general law 13,848, which is applicable to eleven regulatory agencies at the federal level. However, the new statute in no way replaces the

³² The most recent study on Brazil's road quality, conducted by the Confederação Nacional do Transporte (CNT) in 2024, evaluated the country's highways, including both federal and state-managed routes.

³³ Izabel Dompieri, who works at the International Finance Corporation and has participated in the modeling of the projects, stated that in the road sector certain themes are no longer under questioning, such as auction criteria or self-sustainability of the projects. Therefore, people have time and incentives to focus on innovation. The note was made at the event held by the Association of Lawyers of the State of São Paulo, on November 13th, 2024.

original one. The new federal law sounds more as an attempt of the Federal Government to render the ecosystem of several regulatory agencies more uniformized.³⁴ This also seems to be the legal strategy behind law 1,413 of 2024 in São Paulo.

Chile shows an intricate path because it seems to bypass the Regulatory State to send the letter of credibility for long term and institutional investors. As previously mentioned, the Chilean public works concession system began in 1981 with the publication of law 18,060, which stipulated that the Ministry of Public Works would be solely responsible for the execution and maintenance of public works, funded by fiscal resources. This law was amended in 1991 by law 19,068, which allowed individuals or legal entities to submit proposals to the Ministry of Public Works for public works projects. That is, if one wants to interact, understand and do infrastructure business in Chile, it is at the Government's door that one should knock. No external or decentralized regulators will be invited to sit on the table. The program keeps going on though.

The first phase of Chilean concessions (1992-1994), considered experimental by the specialized literature, focused on improving existing roads to increase capacity. These projects were small-scale and aimed at testing the market and gaining experience in public tenders. The first project was the *El Melón Tunnel* (1993), which used a complex selection mechanism involving seven variables. The second project, *Ruta de la Madera* (1994), faced similar difficulties, with a complex formula integrating six variables for selection. In 1995, further improvements were made to the bidding process, initiating what is usually called as a second phase of Chilean highways concessions. The *Nogales-Puchuncaví* route was auctioned using a system that selected the bidder based on the toll amount offered. Additional projects followed, introducing mechanisms like the Guaranteed Minimum Revenue to attract investors by ensuring a minimum income for concessionaires.³⁵

The third stage, beginning in 1996, included larger infrastructure projects, while the fourth phase (from 1998 onwards) focused on urban transport, especially in Santiago. Most of these urban projects had fixed-term contracts, with the winning bid based on the offered payment for the rights to operate

³⁴ The heterogeneity and contingencies of the regulatory agencies' experiences in Brazil have been recognized as consequences of the adaptation process. For more information, see: REIS, *Administrative policy law*, *po. cit.*

³⁵ IPEA. *Modelos de concessão de rodovias no Brasil, no México, no Chile, na Colômbia e nos Estados Unidos: evolução histórica e avanços regulatórios*. Brasília: Ipea, 2018.

the concession. Today, according to data provided by the government, Chile has 51 operational concession contracts, 20 under construction, and nine in both phases simultaneously, in a way that, despite challenges that have been faced, such as how to deal with default, the market views the Chilean system as being in a “*stellar moment*.” A total of 43 concession projects are expected to be tendered for an investment of US\$17.6 billion in the 2024-2028 period.³⁶

3.2 Which type of political shield does the directive board have?

It is true that the analysis of the autonomy of the agencies might be a static or a dynamic one.³⁷ That is, one may verify the legal features that confer autonomy to a determined regulatory agency or try to understand how this agency performs this autonomy through its articulation to other actors of the State archipelago. To this end, we must examine the regulatory framework governing each agency.

In the Brazilian case, the general situation is similar for both ANTT at the federal level and Artesp in the State of São Paulo. Regarding ANTT, under resolution 5,976, of 2022, the Board of Directors is the agency’s highest decision-making body, composed of a General Director and four Directors. These Directors can only lose their mandates under specific circumstances outlined in the General Law on Federal Regulatory Agencies (federal law 13,848 of 2019): resignation, a final judicial conviction, or conviction in a disciplinary administrative proceeding.³⁸ At the federal level, this new framework contrasts with the previous one, as the ANTT’s founding law (federal law 10,233) provided that directors could be removed for “*clear non-fulfillment of their duties*,” a provision that allowed for greater interpretive flexibility.

³⁶ Available at: <https://www.bnamericas.com/en/features/chiles-concessions-system-enjoying-stellar-moment>. Accessed on: Nov. 26, 2024.

³⁷ PEREIRA NETO, Caio Mario da Silva; ADAMI, Mateus Piva; LANCIERI, Filippo Maria. O diálogo institucional das agências reguladoras com os Poderes Executivo, Legislativo e Judiciário. In: SUNDFELD, Carlos Ari; ROSILHO, André (Coord.). *Direito da regulação e políticas públicas*. São Paulo: Malheiros, 2014. p. 89-112.

³⁸ “Article 9 — A member of the Board of Directors or the Collegiate Directorate shall lose their mandate only in the following cases: I — in case of resignation; II — in case of final judicial conviction or conviction in an administrative disciplinary process; III — for violation of any of the prohibitions set forth in Article 8-B of this Law. Sole paragraph. (Repealed).”

In the case of Artesp, state complementary law 914 of 2002 used to state³⁹ that only administrative illicit or judicial conviction of last resort could imply the loss of the mandate. In 2024, São Paulo State enacted complementary law 1,413, which establishes the legal framework of state regulatory agencies, including Artesp. Under the new law, in addition to judicial conviction or disciplinary administrative proceedings, members of Artesp's Board of Directors may lose their mandates for violating any of the expressly outlined prohibitions, including: (i) receiving fees, percentages, or costs under any title or pretext; (ii) engaging in any other professional activity, except where compatible with their official schedule and absent a conflict of interest; (iii) engaging in political party activities; or (iv) using information obtained through their position contrary to the agency's current information disclosure policy or improperly for personal or third-party benefit.⁴⁰

In Chile, the idea of having a directive board that is legally embodied to resist political fluctuations and technically manage the contract has not enjoyed eco through the same institutional design. That is, there is no directive board insusceptible to getting fired. On the contrary, Ministry of Public Works, which is part of the Government and accountable by the Presidency, is in charge of planning, designing, building, expanding, repairing, maintaining and operating the national public infrastructure system, including roads, highways, bridges, tunnels and airports. Within Ministry of Public Works, specialized bodies may support these functions, such as *Fiscalía de Obras Públicas*, *Dirección General de Obras Públicas*, *Coordinación de Concesiones*, by the idea of an autonomous structure between the Government and concessionaires has not taken place. This does not mean that the dialogue cannot be transparent, or the management of the concessions are not driven by technical elements but points out that the institutional features simply do not match with the Regulatory State model⁴¹.

³⁹ "§ 1º — The members of the Board of Directors of ARTESP shall lose their mandate in the occurrence of an administrative offense, determined through an administrative process as established in its internal regulations, or based on a final judicial conviction."

⁴⁰ "Article 32 — The members of the Board of Directors shall lose their mandate only in the case of: I — resignation; II — final judicial conviction or conviction in an administrative disciplinary process; III — violation of any of the prohibitions set forth in Article 33 of this supplementary law".

⁴¹ One way to enquire this reality is that the Chilean bureaucracy developed itself under a technocrat ideal type, which means that a technocrat regulatory agency would not make sense. That is, the Ministry is already technocrat and an independent body with such a feature would not be appealing to provoke an institutional reform. To access an analysis of the dilemmas and reshaping of the Chilean State Governance, see Dezalay, Yves; Garth, Bryant. *The internationalization of palace wars: lawyers, economists, and the contest to transform Latin American states*, University of Chicago, 2002.

Chilean Law 19,882, of 2003, which governs the human resources policy for public servants, establishes a high-level policy management system (*sistema de Alta Dirección Pública* – ADP) regulating the recruitment of public servants in managerial roles involved in public policy implementation or service delivery. Senior civil servants form a distinct group with a centralized, defined skills profile. Their careers are managed and assessed with a focus on performance, and their terms are shorter than regular staff. Recruitment is centralized, with selection, training, evaluation, and development processes.

The Colombian case is provocative because it preserves an ambivalence between the technical autonomy and the political participation in the decision-making process through concrete structures of its governance. That is, the coexistence is not hidden or declared undesirable, both political and technical forces seem to be contemplated within the governance of the agency. The Colombian case confers complexity to the discussion, given that, on the one hand, the Brazilian case has made efforts to render autonomy deeper, and, on the other hand, the Chilean case sounds little sensitive to the idea of having a decentralized and autonomous administrative body from the central power.

The preservation of the ambivalence is first identified from the fact that, after the decree 4,165 of 2011, recently modified by the decree 756 of 2022, the legal concept (“*naturaleza jurídica*”) that backs the Agency is explicitly very close to the Brazilian one. That is, the Infrastructure National Agency (“ANI”) is a national state-body agency of special order, decentralized from the executive body of the government, entitled by legal personality and administrative, financial and technical autonomies. On the other hand, the idea of a political shield is treated from a completely different perspective. The President of the ANI is freely nominated and dismissed from the President of the Republic,⁴² with apparently no legal protection of a sort of *mandate or incentive* to resist political orientation, which goes completely against what we have found in the Brazilian case.

In addition, the President of ANI has a rather administrative role and performs as a legal representative of the agency, but his decision-making power sounds profoundly influenced by the existence of a Directive Board in nothing similar to the ones found at Artesp and ANTT. The Directive Board is actually composed by nine members: the Ministry of Transport himself, who is the president of the Directive Board, the Ministry of Environment

⁴² Article 10 of the Decree 4165 of 2011. Available at: <https://www.funccionpublica.gov.co/eva/gestornormativo/norma.php?i=44678>. Accessed on: Nov. 24, 2024.

and Sustainable Development, the Ministry of Finance and Public Credit, the Director of the National Department of Planning and five independent members, who are chosen by the board itself⁴³. Interestingly enough, the Directive Board, with all this political DNA, *is part of* the ANI's formal design. It is not a governance mezzanine between the Agency and the Government to exert control or denature the autonomy of the agency. It is indeed embedded in the functioning of agency and its President and Executive Vice-President will take part in the meetings, with the possibility of presenting their point-of-views, but with no vote.⁴⁴

3.3 *Who says the final word?*

In Brazil, the definition of who has the final say generates various debates at the federal and state levels. In the State of São Paulo, the situation is clearer due to established regulations. In Artesp, since State complementary law 914, of 2002,⁴⁵ there is a clear rule according to which the Artesp's decisions will not be susceptible to resort or appeal to other administrative bodies. This means that the Directors have the final word about the issue within the administrative sphere. That is, although one can always go to the Judiciary to challenge the regulatory agency's deliberation, it is entitled to exert its autonomy, if one considers the administrative sphere, regardless of the possibility of being questioned before the secretary to which the agency is linked or to the governor. After the promulgation of the complementary law 1,413, approved in 2024, this autonomy has become even clearer, as law reinforces in several articles the idea according to which there is no hierarchical subordination or that the decisions cannot be reviewed.

For instance, Article 24 of complementary law 1,413/2024 establishes that no administrative appeal may be filed against the decisions of the Board of Directors of regulatory agencies, allowing the submission of a request for reconsideration before the Board itself, in the manner provided in its internal regulations. The sole paragraph of the same article specifies that decisions

⁴³ Article 8 of the Decree 4165 of 2011. Available at: <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=44678>. Accessed on: Nov. 24, 2024.

⁴⁴ Article 8 of the Decree 4165 of 2011.

⁴⁵ The §3, art. 15 of law 914 of 2002, prescribes that from the decisions of the Directive board, none can appeal at the administrative sphere (*"Decisions of the Board of Directors shall not be subject to any appeal in the administrative sphere"*).

made by the Board of Directors, in the context of an appeal, in sanctioning administrative processes and disciplinary administrative procedures, will be considered final in the administrative sphere, not subject to appeal or request for reconsideration.

In the specific case of the ANTT, its law (federal law 10,233/2001), particularly Articles 66 to 68 (which address the agency's decision-making process), does not prohibit the administrative review of its acts through improper hierarchical appeals to the Ministry of Transport. Moreover, law does not explicitly state that ANTT has the final say on matters within its purview, unlike, for example, law that created Anatel (National Telecommunications Agency — *Agência Nacional de Telecomunicações*). Additionally, some interpret §3 of article 68 of law 10,233⁴⁶ as granting any interested party the right to petition or appeal against an act of the ANTT.⁴⁷ In Colombia, it is hard to say that the final word does not belong to the regulatory agency but is equally hard to recognize this decision as a parallel administrative path independent to the Government. The reason relies on the fact that the decision-making process in very sensitive themes derives from the Directive Board, which is composed and elected by high positions from the Government and led by the Ministry of Transportation. For example, the Board approves the financial situation of the agency and sends orientations concerning the execution of the projects, in addition to approving the proposition of earnings concerning the asset valorization derived from infrastructure projects. The Decree is clear that the President has a rather executive role, as it states that the President must comply and make the Agency comply with the decisions made by the Directive Board.⁴⁸

Moreover, the governance within the Agency seems to foment more pulverized spaces of decision-making, although at the last resort they might be submitted to the Directive Board. The decentralized governance is reflected

⁴⁶ § 3º Any person, as long as an implicated part, has the right to claim or appeal against the acts of ANTT, within 30 days counted from its formal enactment, according to the regulation. Available at https://www.planalto.gov.br/ccivil_03/leis/leis_2001/110233.htm. Accessed on: Nov. 26, 2024.

⁴⁷ At the federal level, the so-called “improper hierarchical appeals” continue to cast uncertainty over the decisions of federal agencies, including the ANTT. Improper hierarchical appeal refers to the possibility of reviewing acts of entities within the indirect administration, which are supposed to be autonomous legal entities, by the Ministry to which they are linked. However, this view is less predominant in Brazil.

⁴⁸ Article 11, 34, of he Decree 4165 of 2011. Available at: <https://www.funcao-publica.gov.br/eva/gestornormativo/norma.php?i=44678>. Accessed on: Nov. 24, 2024.

by the existence of eight Vice Presidencies below the President, who is below the Directive Board. For instance, we see a whole Vice Presidency dedicated to the modeling of new projects, whereas there is another Vice Presidency dedicated to the management of the ongoing projects. More than that, the Directive Board might nominate Advisory Councils, one for the modeling of the projects and another one for the management of the projects. These councils are composed of interdisciplinary profiles (engineering, finance, legal and so on), but with specific scholarly experience and resorted by the ten best universities of the country. These members have the logic of fix mandates of four years, which can be renovated once.

In Chile, law 19,880 from 2003, which sets the basis for the administrative procedures that regulate the acts of institutions of the State administration (including Ministry of Public Works), establishes the principles for reversal and hierarchical recourse against decisions by the administration. Citizens also have a right to an extraordinary recourse of revision according to the same law. In some cases, there might be two proceedings, as the hierarchically superior institution can also play the appeal role, but this does not always happen. There is always the possibility of challenging the administrative act either by judicial means, lodging an action in the ordinary courts of justice by an application to have a public right declared null and void, or by administrative means with a petition to the General Controller of the Republic.

4. Final remarks

This paper analyzed how Brazil, Chile, and Colombia have implemented their infrastructure strategies through a comparative approach. The central hypothesis is that innovation flourishes in environments with technical expertise, political resilience, and a long-term vision for contract execution and oversight. The study aimed to test whether regulatory agencies — potentially possessing these characteristics — serve as the essential institutional mechanism for concession and partnership programs.

The findings confirm that Brazil, Chile, and Colombia have effectively leveraged highway concession programs to attract investment, foster competition, and drive innovation. However, the institutional frameworks supporting these successes vary significantly. In Brazil, regulatory agencies operate with formal safeguards against political interference. In contrast, in Chile and Colombia, political actor, whether formally or informally, maintain

a significant role in the governance of concession programs. Then, only Brazilian model aligns more closely with the ideals of the Regulatory State, relying on autonomous agencies to enhance credibility and ensure continuity.

This suggests that political insulation is not a necessary condition for the relative success of highway concessions. Rather than a “one-size-fits-all approach”, the cases point to different institutional strategies for managing long-term contracts. Each reflects local legal traditions, governance structures, and political economies. The findings may call for a reassessment of how autonomy and effectiveness are understood in regulatory governance. They show that agency independence, while valuable, *is not the only path to credible and functional infrastructure policies*. Political engagement and institutional hybridity can also deliver results – depending on how they are structured and perceived.

Ultimately, this research invites a shift in focus: from abstract models of best practices to grounded analyses of how institutions actually work. The challenge is not simply to import regulatory frameworks, but to adapt them to context – acknowledging the political, legal, and administrative realities that shape public policy on the ground.

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