

Failing to Promote Competition: From the Inaction of the Brazilian National Agency of Petroleum to the 2018 Brazil Truckers' Strike

Marcelo Vítor Martins de Meneses¹

¹ Department of Government, London School of Economics and Political Science, London, United Kingdom

Correspondence: Marcelo Vítor Martins de Meneses, Brazilian National Agency of Petroleum, Natural Gas and Biofuels - ANP, Rio Branco Avenue, 65, Rio de Janeiro/RJ, Zip code: 20090-003, Brazil. E-mail: mmeneses@anp.gov.br

Received: October 26, 2023 Accepted: December 11, 2023 Online Published: December 12, 2023

doi:10.5539/par.v13n1p1

URL: <http://dx.doi.org/10.5539/par.v13n1p1>

Abstract

This article seeks to clarify the political reasons and behavioral biases that led the Brazilian National Agency of Petroleum (ANP) to fail in its institutional mission to promote competition in the refinery sector, which was one of the leading causes of the Brazilian truckers' strike in 2018. Following the steps of Hood (1974), who differentiates internal and external problems in the organization, five hypotheses were formulated to identify the causes of this regulatory failure. These hypotheses allow us to recognize the conflicts that emerge from the relationship between the ANP and its external stakeholders and the internal organizational factors that cause coordination problems and attention bias in the institution's daily decision-making process. Based on interviews conducted with former ANP directors and the application of a questionnaire to employees of that institution, it was found that the agency's lack of independence from the Federal Government made the institution not strive for a more competitive refinery sector. Furthermore, several internal coordination problems and bad decisions by political bureaucrats were also crucial factors in the regulatory inefficiency, making the promotion of competition in the refinery sector outside the institution's priorities. Analyzing the causes of this regulatory failure in Brazil is essential because the global regulatory system has several structural flaws that only become apparent when high-impact events appear. Therefore, this study can provide insights into different regulation domains, allowing countries to assess their regulatory systems to perceive the need for change, preventing their population from suffering from the dysfunctions of public administration.

Keywords: competition, fuel market, policy analysis, regulatory failure

1. Introduction

In 2018, Brazil stopped for ten days because of an unexpected strike. On May 21, truck drivers began to interrupt the flow of cargo transportation on Brazilian roads in protest against the high tax burden on diesel and the new pricing policy applied by Petrobras (the Brazilian National Oil Company). Due to the government's inability to deal with the crisis, the movement spread along Brazilian roads, receiving support from several other social groups that defended everything from fighting corruption to military intervention. As a result, the strikers blocked practically all federal roads, completely stopping the country.

The strike officially ended on May 30, after the government established a deal with part of the strike movement and determined the use of military forces to unlock the highways. If the truckers' strike started and ended in a short period, the same cannot be said about its consequences. Economists estimate that the strike's economic impact was at least R\$ 15 billion, which represented a decrease of about 0.2% in the Brazilian Gross Domestic Product in 2018.

Moreover, the implications of the stoppages far transcended the fiscal issue. The strike brought back to life an issue that used to be rarely debated in society: Petrobras' monopoly in the Brazilian refinery industry. Until 2021, of Brazil's 17 large-scale fuel refineries, the state-owned company owns the 13 largest, accounting for 98,6% of domestic fuel production. Due to this high market share, the company's pricing policy has a decisive impact on the fuel sector and the Brazilian economy.

However, for academics in the field of regulation, one question stands out: why did not the Brazilian National Agency of Petroleum act to promote the opening of the refinery sector, avoiding such market concentration? The

Brazilian National Agency of Petroleum (Portuguese: Agência Nacional do Petróleo, Gás Natural e Biocombustíveis - ANP) was created in 1997 to develop the regulation of economic activities that are part of the oil industry, having as a guiding principle the promoting of free competition as a mean to generate an environment that encourages investments. Nevertheless, after more than 20 years of its creation, the refinery sector did not develop as expected. In this period, only two private micro-refineries have ventured to start operating in the country.

Regulatory failure is not a novel academic issue. Since the mid-19th century, authors have been criticizing regulatory agencies, presenting many explanations to claim that agencies were ineffective in defending public interests. Some suggest that regulatory agencies undergo an aging process, replacing the public interest throughout their lives with the pursuit of the interest of the regulated agent (Bernstein, 1955). Others postulate that all actors in the regulatory process are guided by their own interests (Stigler, 1971). Other authors, however, disagree with the simplistic view of these theories. For them, reducing the handicaps of public administration to problems of excessive bureaucracy and corruption is inadequate (Hood, 1974; Bach & Wegrich, 2019).

Therefore, this article brings forth the political motives and behavioral biases that led the ANP to fail to promote competition in the refinery sector. Based on interviews, it was found that the agency's lack of independence from the Federal Government made the institution not strive for a more competitive fuel sector. Furthermore, several internal coordination problems and bad decisions by political bureaucrats were also crucial factors in regulatory inefficiency. Thus, by analyzing the causes of this regulatory failure, other countries can assess their own regulatory systems, preventing their population from suffering from similar regulatory dysfunction.

Following this introduction, Chapter 2 will focus on regulatory agencies and their failures. Then, in the subsequent section, the oil industry in Brazil will be presented, emphasizing the role of the sector's regulatory agency. Chapter 4 is dedicated to a discussion of the research methodology and hypotheses that guided the study. The research results, in turn, will be analyzed in section 5. Finally, the concluding chapter summarizes the main points discussed in this article and presents ways to expand the study of regulatory failures.

2. Regulatory Agencies and Their Failures

The delegation of regulatory powers from political authorities to independent regulatory agencies in the final decades of the 20th century became a central feature of the modern structure of capitalist countries. This trend was especially noticeable in European countries, which from the 1970s onwards were forced to abandon their welfare policies that emerged as political priorities after the end of World War II (Majone 1997). In this process, state-owned companies, especially those in the public utility sector, were transferred to the private sector through privatization (King, 2007).

From then on, independent regulatory agencies became a fundamental part of the state. The main reason governments have attempted to transfer some of their regulatory powers to institutions isolated from political influence can be explained by the necessity to deal with the credibility problem. This is a crucial issue, because the political short terms required by the democratic process negatively interfere with the continuity of public policies. In this way, transferring competence from the hands of politicians to independent regulatory agencies would guarantee the state's loyalty to the new model of social governance, encouraging private investors to participate in the privatization process (Gilardi, 2002).

The first work in the area of social policy to present an academic analysis of regulation was developed by Bernstein (1955). In his masterpiece, the author claimed that regulatory agencies might be created after political disasters, giving rise to the protection of the population from unscrupulous private agents. As a matter of intense political attention, the new regulatory agency would attract zealous bureaucrats. However, as society stops paying attention to the issue that gave rise to the institution's creation, zealous bureaucrats would seek new positions of greater political relevance, remaining only low-level bureaucrats at the agency. Finally, with the end of the institution's importance, the employees start to associate with the agents that should be regulated to sustain the organization, being entirely controlled by the private sector (Hood, 1994).

Notwithstanding, no analysis of regulatory dysfunctions has achieved such an impact as the assessment made by Stigler (1971). In his article, the author affirms that regulation is designed to operate in favor of economic agents that should be regulated. Regulation favors private agents over the population because a significant part of public policies presents disperse benefits, so the population has little incentive to engage in the political process. On the other hand, businesses have the resources to support politicians who represent their causes. In this way, the regulatory process suffers from the collective action problem: only concentrated interests with prospects of high benefits will successfully pursue collective action (Carrigan & Coglianesse, 2016).

However, the theories based on the regulators' self-interest failed to consider the ideological and cultural factors

that govern organizations (Hood, 1994). Public administration can never be understood as disconnected from its political and social context, since part of the administrative failures is related to the inability to meet the plurality of external demands. In this way, trying to justify the dysfunctions of public administration based on the perception of bureaucrats as self-interested is to turn a blind eye to the other mechanisms that cause the defeat of honest and intelligent bureaucrats (Hood, 1974).

Thus, exploring the differentiation between internal and external organizational failures, Black (2014) characterizes regulatory disasters as the unanticipated and unexpected consequences of regulation that result from the operation of regulatory systems and their interaction with other systems. They can arise directly from disastrous decisions taken by regulatory officials or decisions influenced by the political system, or from internal factors, such as culture, lack of expertise on the part of the technical staff, lack of information, knowledge, or necessary information, and, finally, inattention and strategic errors.

In recent times, however, authors have increasingly focused attention on the effect of poor coordination within and between bureaucracies. Following this trend, Bach and Wegrich (2019) developed a typology of four distinct biases in organizational attention. The first, selective perception, is related to the limitations individuals suffer within organizations due to the division of labor structures. Following, inherent weaknesses, which is an unintended consequence of the institutions' work structure and cultural decisions. The third type of bias, bureaucratic politics, concerns the organizations' deliberate decisions to select the target for its attention. Finally, blind spots, which are linked to problems that have gone unnoticed in the eyes of regulators.

3. The Brazilian National Regulatory Agency of Petroleum

Although the consumption of petroleum-derived products has been bubbling up since the end of the 19th century, the Brazilian refining industry would only start taking its first steps in the early 1930s, when Monteiro Lobato created the first Brazilian prospecting company (Companhia Petróleo Brasil). From that moment on, some small private national capital companies in the oil refining sector started to emerge. Still, as part of an economic reorganization proposal, the Decree-Law No. 395, of May 1, 1938, determined the nationalization of the refining industry and created the National Petroleum Council (Portuguese: Conselho Nacional do Petróleo - CNP), responsible for regulating the activities related to the petroleum industry.

It turned out that the Second World War drastically affected the petroleum products sector in Brazil, and the reduction in oil exports by exporting countries seriously compromised industrial activities dependent on these fuels. This situation further intensified discussions on the issue of the strategic importance of oil and the role of foreign capital in the country's economic development. Thus, heavily pressured by the nationalists, the government was forced to determine the adoption of a state monopoly on this activity. In this context, on October 3 of 1953 (Law No. 2004), Petrobras was created. A national company with majority capital of the Federal Government, responsible for exploring all oil industry activities under the condition of a monopolist (Brasil, 2015).

Turns out, the great driving force behind the Brazilian refinery industry was the creation of Petrobras. After slow progress in the development of the refinery sector in the 1930s and 1940s, the country experienced a period of significant investments made by the state-owned company, mainly during the 1960s and 1980s. This period coincides with the period of the Brazilian military dictatorship, when the country witnessed the highest growth rates in its history, with fuel supply meeting demand due to high investments in infrastructure.

The beginning of the 1990s, however, marked the crisis in the Brazilian state. The solution to this situation, then, was the opening of the economy to private capital. For this, however, profound changes had to be made in the Brazilian regulatory framework. The most crucial transformation happened with the publication of the Petroleum Law (Law No. 9,478, of August 6, 1997), which extinguished the state oil monopoly in Brazil. Besides, it created the Brazilian National Agency of Petroleum (ANP), an independent agency responsible for overseeing all oil industry activities, promoting free competition, guaranteeing quality and prices, as well as creating an environment conducive to investment (Brasil, 2015).

Over more than two decades of existence, as the main strategy to attract investments from multinational oil companies, the ANP has defined the exploration and production sectors as the pillars of the oil industry in Brazil. As a result of this strategy, more than 50 new production and exploration companies were attracted to Brazil. However, the same success was not seen in the refining sector. Only one large refinery was installed in Brazil during the ANP's existence (Note 1).

According to analysts, one of the major obstacles to creating a competitive refining market is the incumbent's market power. Petrobras' refineries were installed with no concern about generating competition but optimizing production costs. Thus, these refineries fully supply the demand of a region without generating redundancy. A

second factor that has been flagged as inhibiting foreign investment is the lack of regulation on the prices charged by the incumbent. Petrobras operates in the market as a *de facto* monopolist without any control by the regulatory agency. Introducing a pricing policy could generate greater credibility that prices would be operated according to technical rather than political factors (Mendes et al., 2018). These obstacles could have been correctly addressed, with the reduction of Petrobras' market power, however, the lack of concrete action by the ANP is identified as one of the crucial factors that triggered the truckers' strike.

4. Research Methodology

After any disaster, there is always an attempt to determine who was to blame for the crisis (Black, 2014). In the case of the Brazilian truck drivers' strike, it was no different. An intense political and academic debate was initiated, bringing to light an issue little discussed in Brazil: Petrobras' monopoly on the refinery sector. One of the most complex issues to understand was how, even after the end of the state monopoly on oil activities, there is no competition in the refinery sector in Brazil. In other words, why has not the ANP achieved its goal of promoting free competition two decades after its creation?

Therefore, not shying away from the need to analyze the relationship between the regulation of the refinery sector and the truckers' strike, this research seeks to understand why the ANP failed to promote competition in the refinery sector, not producing an investment-friendly environment. Aware that analyzing the causes of regulatory disasters is imperial for improving the global regulatory system, five hypotheses were formulated to identify the causes of this regulatory failure. Following the steps of Hood (1974), who differentiates internal and external problems to the organization, the first two hypotheses formulated seek to recognize the conflicts that emerge from the relationship between the ANP and its external stakeholders, especially the Federal Government and Petrobras. The following three hypotheses set out to investigate the internal dynamics that cause administrative dysfunctions (Bach & Wegrich, 2019). The expectation is that the comprehension of the factors that limited the actions of the ANP and the issues that went unnoticed by the Brazilian regulator can generate lessons, not only for the sector's regulatory bodies but also for other domains, preventing future disasters.

4.1 Hypotheses

Hypothesis 1: Regulatory Capture - The ANP was influenced by Petrobras not to promote competition in the refinery sector.

In Stigler's words, "regulation is acquired by the industry and is designed and operated primarily for its benefit" (Stigler, 1971, p.3). The author emphasizes that regulatory agencies vastly advance private interests because the way political institutions are created encourages private interests to the detriment of the general interest of the population (Carrigan & Coglianese, 2016). Moreover, once regulatory agencies are captured, they start to protect the monopolist's profit, acting to block the entry of new companies (Carpenter & Moss, 2013), because the monopoly profits will be shared between the company and the politician-regulators interested in party favoring and re-election (Baldwin & Lodge, 2012). In addition, other authors have highlighted the role of the "revolving door" mechanisms between the regulated company and the regulatory agency in the capture process, in which post-term interests interfere in the attitudes taken while acting as a regulator (Braun, 2016).

Therefore, as Petrobras' monopoly was a market failure that threatened the public interest and the regulatory agency did not act to correct it, it is plausible to consider that Petrobras captured the ANP. These suspicions become even more present when one considers that during the creation of the ANP, several former Petrobras employees became regulators, and some of them reached the top of the agency's hierarchy. Additionally, the agency has been used as a "revolving door". Some of the ANP's directors have come from the private sector and returned to the regulated industry after a brief stint in the regulatory body.

Hypothesis 2: Lack of Independence - The ANP was influenced by the Federal Government not to promote competition in the refinery sector.

As stated by Majone (1997), the segmentation of the democratic process into short terms of office prevents the solution of social problems that demand long-term measures. One of the ways to resolve this temporal inconsistency and generate credibility for public policies is to delegate powers to independent regulatory agencies (Gilardi, 2002). However, the independence of agencies, a hallmark of the modern regulatory system, has been widely challenged by government officials in recent times. Politicians have sought to return to the core of the regulatory process, reinserting their party vision into economic regulations (Vibert, 2016). Furthermore, it has been increasingly difficult to protect the segmented and independent role of the agency staff amid growing political demands for policy coordination (Koop & Lodge, 2014).

Therefore, the ANP's inaction in promoting competition in the oil refining market may have been caused by the

agency's loss of independence. In this context, the agency began to pursue the interests of the government in power, which was the maintenance of the refining monopoly in Petrobras' hands to keep the ability to promote populist public policies.

Hypothesis 3: Selective Perception - Promoting competition in the refinery sector was not a priority objective of the ANP.

According to Dearborn and Simon (1958), faced with a situation of complexity, an organization will deliberately channel its attention to those issues considered to be explicitly related to the organization's mission, not emphasizing other subjects' goals. In this process, the sub-units of an organization are constrained to perform one expected role, even if this does not guarantee the achievement of the institution's general objective. In that regard, Koop and Lodge (2014) highlight the problem of underlap coordination, which is characterized by the lack of a political actor who can put specific issues on the agenda, especially when the competence for one matter is shared between different internal departments and the matter at hand can generate organizational costs.

Based on his theory, it is plausible to conclude that the ANP deliberately focused its attention on themes exclusively concerned with its core mission. This selective perception placed complex issues that depended on coordination between different public bodies in the background – such as the case for promoting competition in the refinery sector.

Hypothesis 4: Blind Spot - The necessity to promote competition in the refinery sector was not perceived by the ANP.

When organizations are operating under selective perception, there is a conscious decision to focus on specific tasks, due to the organization's specialization process. However, in the case of a blind spot, the decision process is unconsciously driven (Gieve & Provost, 2012). Central to the understanding of blind spots is that they involve a lack of attention to a particular object, regardless of whether the organization has the necessary information to propose solutions to that problem (Lodge, 2019). The organization simply discards the information because it is not compatible with the institution's identity, that is, its institutional mission (Gilad, 2015). Thus, one challenge that comes from blind spots is that they cannot be detected from within the organization, and disasters are needed to make visible what is not seen.

In this regard, it can be conceived that the promotion of competition in the refinery sector was a blind spot for the ANP. The board of directors fixed the institution's attention to specific issues, and over time these choices were culturally adopted as official by ANP employees. Therefore, goals outside this initial selection went completely unnoticed in the eyes of subsequent directors and agency staff.

Hypothesis 5: Reputational Concerns – Concern for reputation shaped the attention given by the ANP to promoting competition in the refinery sector.

Allison and Halperin (1972) present a vision of public organizations as political entities whose primary interest is to maintain their autonomy to carry out the activities that make up the essence of the organization. In this pursuit of defending their interests, organizations face a crucial challenge: maintaining a broad support base for their activities in a political environment characterized by diverse audiences. Then, the ability of a public institution to overcome this difficulty is necessarily linked to the construction of institutional reputation, which can be understood as a set of beliefs about the institution concerning its capabilities and mission, nurtured among the stakeholders (Carpenter & Krause, 2012).

In the case of the ANP, it can be assumed that the institution avoided taking measures toward the application of competition in the refinery sector because no audience effectively requested this action. Therefore, attempts to pursue this objective would not bring any additional institutional support to the agency. Furthermore, because this measure was contrary to the interests of the Federal Government and Petrobras, it was suppressed in a blame-avoidance behavior.

Table 1 presents the summary of the hypotheses, categorizing them according to the source of the regulatory failure.

Table 1. Hypotheses

Category	Hypothesis	Description
External	1 – Regulatory Capture	The ANP was influenced by Petrobras not to promote competition in the refinery sector
	2 – Lack of Independence	The ANP was influenced by the Federal Government not to promote competition in the refinery sector
Internal	3 – Selective Perception	Promoting competition in the refinery sector was not a priority objective of the ANP
	4 – Blind Spot	The necessity to promote competition in the refinery sector was not perceived by the ANP
	5 – Reputational Concerns	Concern for reputation shaped the attention given by the ANP to promoting competition in the refinery sector.

Source: own elaboration.

4.2 Methodology

In searching for an answer as to why the ANP failed to promote competition in the refining sector, a qualitative analysis of the decision-making process and the resulting coordination problems seems to be the most appropriate path. Thus, this article draws on interviews with the institution's former directors and a questionnaire applied to ANP's employees. Although qualitative research is adequate to analyze complex problems in-depth, such as the one addressed in this article, it is essential to alert the readers to the limitations of the chosen methodology. Firstly, due to limitations relates to the understanding bias of the interview and questionnaire participants, the answers presented reflect the participants' perception of the world, which is influenced by the skills and idiosyncrasies of each professional. In addition, the sample of employees obtained with the questionnaire cannot precisely reflect the understanding of the entire population intended to be analyzed. Despite these obstacles, qualitative research remains appropriate in this case, as the total absence of data on the motivations and influences suffered by the institution during its decision-making process becomes an insurmountable problem for conducting quantitative research.

In addition to the measures taken to ensure the anonymity of those interviewed, only directors who ended their term in office by 2020 were invited to participate in the interviews. The main reason for this measure was the understanding that only after leaving the institution the interviewees could ultimately analyze the pressures they suffered from different stakeholders without an organizational bias. Since its creation in 1998, the ANP has had 21 directors, while 18 are still alive. Of these, 14 (78% of the total) agreed to participate in a semi-structured and open-ended interview. When expressly authorized, the interviews were recorded, and the transcript was used to identify general patterns revealed by the interviewees. To guarantee the complete anonymity of the interviewees, one number was assigned to each director according to the order in which their interviews are quoted.

Furthermore, a questionnaire was sent to the email box of ANP employees. Of the 803 civil servants that make up the institution's permanent staff, 52 responded to the questionnaire, which corresponds to 6.5% of the population. This questionnaire addressed the same issues discussed with the directors, but it was composed of closed-ended questions. The objective was to verify if top management and bureaucratic officials understood the factors that lead to administrative dysfunctions in the same way. Like the interviews, participants were guaranteed that the questionnaire was completely anonymous and that the information acquired would only be presented in an aggregated form. Finally, the last question in the questionnaire was an open field in which respondents were invited to share their perception of why the ANP had failed to promote regulation of the refinery sector in Brazil.

5. Results and Discussion

Capture theory returned to the heart of academic discussions on regulation after the outbreak of the 2008 financial crisis (Braun, 2016). Many analysts of this crisis condemned the relationship between financial regulators and investment banks, claiming that the easy life of banks was due to the capture of regulatory agents, who were supposed to oversee the market. However, trying to prove capture is not as easy as just seeing it in any regulatory failure. There is an immense difference between saying that a situation can plausibly occur and proving its

existence through statistical correlations (Carpenter & Moss, 2013). This makes it hard for a researcher to claim that a regulator was consciously favoring the companies they would control.

Given this obstacle, no direct questions about capture were put to respondents. However, the questions together allowed made it possible to understand the relationship between the ANP and Petrobras. When the ANP was created in 1998, it was necessary to hire consultants and a workforce with knowledge in the oil and gas sectors to start regulating these activities. This staff was mainly made up of retired Petrobras employees, who became part of the first employees of the ANP. In the words of one director, "the ANP was formed by many former Petrobras employees. This made the ANP identify itself with this company so that the first resolutions of the ANP were clearly aligned with Petrobras' interests" (Director 1, 2021). This same vision is shared by another director who reported that "the ANP resolutions had a favorable bias towards Petrobras. However, it cannot be said that the agency was captured" (Director 2, 2021).

Agreeing with Director 2, it is not possible to confirm hypothesis 1, which states that Petrobras influenced the ANP not to promote competition in the refinery sector. Even given the existence of regulations that favored the company and prevented the promotion of competition in the refining sector, one cannot affirm that the state-owned company played an active part in helping this preferential activity to materialize. Even if it directed our attention to the issue of the "revolving door", in which former Petrobras employees have become directors of the ANP, it is impossible to attest to the role played by Petrobras in making these appointments happen. As Coglianese (2016) highlighted, to attest to the influence of a regulated agent on its regulator, one must prove causality. That is, to demonstrate that something that happened would not have happened without an intentional action on the company's part.

Then, continuing to seek the reason for the ANP's inaction concerning the refinery sector, the next step was to analyze the relationship between the Federal Government (the majority shareholder of Petrobras) and the regulatory agency. Vibert (2016) and Eyre (2016) state that governments have been trying to re-enter the regulatory space of independent regulatory agencies. Nevertheless, in the authors' view, this movement reflects a growing acceptance that agencies are just one of the most varied actors in regulation. Furthermore, this incursion has been occurring where agencies have not been able to carry out their primary activities. Still, according to them, this return would not be interfering with the independence of agencies, which is one of the pillars of the modern regulatory system.

In the Brazilian case, however, the limits proposed by Stephen Littlechild between government and agency action have not been respected. Asked whether the Federal Government's interests in maintaining the monopoly of the refinery sector influenced the regulation put into practice by the ANP, 72% of former directors said that ANP was influenced by the Federal Government's interests. A similar number was obtained by asking the same question to the agency's employees, as shown in table 2.

Table 2. Percentage of respondents who consider that the interest of the Federal Government has influenced the attention given to promoting competition in the refinery sector by the ANP

Respondents	Not Influenced	Influenced	Not answered
Directors	14%	72%	14%
Employees	3%	76%	21%

Source: own elaboration.

Governments around the world like to maintain power over the energy market to manipulate the price of this critical input to the economy. In Brazil, it is no different. Some governments have used Petrobras' monopoly for populist actions, such as artificially controlling the inflation rate. However, in the words of one director, "there was never any attempt by the Federal Government to expressly dictate what could and should be the target of regulation. This pressure occurs in a subtle way" (Director 3, 2021). One of the ways this pressure happens is through the selection of directors. According to another director, "the choice of the agency's director indicates a specific direction for the institution; the government's regulatory path for solving a particular social issue" (Director 4, 2021).

The Federal Government's second-mentioned form of controlling ANP activities was transferring the institution's legal competencies to other institutions. The most typical cases were relocating functions to the National Energy Policy Council, an executive body directly linked to the Ministry of Energy. In addition, there are also cases in

which Congress started to draft laws on matters that should only be analyzed within the scope of regulatory agencies. The third form of control mentioned by the interviewees was creating higher bodies linked to the federal government, which would control the agencies through the standardization of processes. Therefore, based on the directors' speeches, it is possible to state that the government's interest in maintaining the refinery monopoly prevented the ANP from acting more effectively in this sector, confirming hypothesis 2.

However, not only external factors lead to regulatory failures. As pointed out by Hood (1974), to conduct a more rigorous analysis of the ANP's actions, it is necessary to look at the institution's internal coordination problems. And one that deserves to be investigated in more detail is what Bach and Wegrich (2019) call selective perception. It is the institution's direction for a particular activity as a result of an erroneous perception about the division of labor within the regulatory system. Trying to verify this dysfunction, it was asked whether it is possible to affirm that the ANP deliberately chose to direct its attention towards other sectors within the oil industry. In response, 58% of directors and 64% of employees agreed with this statement (see table 3).

Table 3. Percentage of respondents who consider that the attention given by the ANP to the issue of promoting competition in the refinery sector was at a level below that devoted to other matters

Respondents	Not Below	Below	Not answered
Directors	21%	58%	21%
Employees	23%	64%	13%

Source: own elaboration.

As seen in the interviews, the motivation for this selective perception is perfectly congruent with the view of Dearborn and Simon (1958). Given the complexity of promoting competition in refineries, the ANP focused on activities linked explicitly to its institutional mission. Activities that required interaction with other agencies, as promoting competition of the refinery sector, were placed as secondary. In the words of one director, "making the refinery sector more competitive was very complex, requiring improvements in the tax, customs, infrastructure, and various other sectors" (Director 3, 2021). In the same vein, another director said: "isolated actions of the ANP to expand the competition would not be enough" (Director 5, 2021). In addition, "the agency did not have arms for all its activities, so it was necessary to choose its battles" (Director 6, 2021).

Therefore, in choosing its battles, the promotion of competition in refining was left by the ANP to the Brazilian competition defense authority (CADE). The ANP's understanding was that reducing oil imports was the greatest contribution the agency could make to the country. As mentioned by one of the directors, "the euphoria with the development of the upstream sector was enough to generate the impression that the ANP was achieving its objectives at all points of its attribution" (Director 7, 2021).

However, the agency's selective perception was motivated not only by the division of labor among the various federal government bodies but also among the internal sub-units of the ANP. As confirmed by one of the directors, "each ANP superintendence has its mission, managing a part of the fuel production chain. In this way, there is a lack of interaction between the superintendencies to understand the Brazilian market more cohesively" (Director 8, 2021). Moreover, the ANP's directors are straight linked to the technical areas of the institution, and this association is not aimed at better integration between the sub-units, but only the directors' control over the work developed by the agency's technical staff. In view of these pieces of evidence, it is possible to accept with a high degree of certainty that hypothesis 3 is true. The agency's attention was directed to some specific issues to the detriment of the refinery sector.

As Bach and Wegrich (2019) mentioned, organizational attention biases are not mutually exclusive. Thus, even with the acceptance of hypothesis 3, it is necessary to analyze other issues that can bring coordination problems. Through the interviews and the questionnaire, it was possible to notice that there was a widely shared consensus among ANP directors and employees that the promotion of competition is an activity that should be pursued primarily by CADE. This understanding has become rooted in the organizational culture of the ANP, so promoting competition in the refinery sector has rarely been discussed. When asked if they had already participated in any discussion on competition promotion, 71% of the employees interviewed responded negatively, as shown in table 4.

In the view of one of the directors, "the regulations published by the ANP already guarantee free competition in the sector, as there is no legal impediment preventing a refinery from being installed in Brazil. If external

investment did not come, it was because of lack of interest from private agents" (Director 9, 2021). Another director mentioned that "the ANP had a conservative and inertial culture, believing that as long as Petrobras was interested in dominating the market, nothing could be done by the agency" (Director 4, 2021). In the same sense, other director mentioned that "the ANP never struggled to be a national reference in the field of regulation, always acting passively" (Director 10, 2021). In this sense, it is possible to affirm that the organizational culture of the ANP acted to blind the institution to the need to act to increase competition in the regulated sectors.

Therefore, the next step was to understand better the agency's non-decision dynamics concerning the competition in the refinery sector. To this end, the employees were asked whether the board of directors acted to limit discussions on this matter. Contrary to expectations, only 25% of the employees stated that there was deliberate action at higher hierarchical levels to impede discussions (see table 4 below). However, the results are congruent with Bachrach and Baratz (1963), who state that one of the faces of power is the practice of limiting the scope of decision-making by manipulating organizational culture. Therefore, the agency's inability to realize that the regulation produced by itself was not able to promote competition in the refinery sector, despite all the information available, proves the existence of a cultural bias that obstructed the decision-making process. Such facts make it possible to validate hypothesis 4.

Table 4. Percentage of responses from ANP employees regarding participation in discussions on competition in the refinery sector and the role of the board of directors in limiting these discussions

Question	No	Yes	No Answer
Have you ever participated in any discussions about promoting competition in the refinery sector at ANP?	71%	29%	0%
Do you consider that the ANP's board of directors acted to limit the discussions about the promotion of competition in the refinery sector?	29%	25%	46%

Source: own elaboration.

Additionally, many authors have investigated the relationship between organizational reputation and bureaucratic autonomy for a long time. According to them, organizations emphasize those activities that can intensify their reputation in front of their audiences to increase their autonomy (Carpenter & Krause, 2012; Wilson, 1980) and protect themselves from external demands (Gilad, 2015). In line with this argument, one of the directors noted that "the promotion of competition was not a topic addressed at the ANP, because it was not a demand from the government, the private sector, or society" (Director 5, 2021). Therefore, given the lack of support to act on such a sensitive subject, the ANP realized that "the path it needed to take to found its power as a regulatory agency was to avoid areas in which Petrobras' willpower was something insurmountable" (Director 11, 2021).

At first glance, this behavior appears to be inconsistent with the vision of an agency with a recognized reputation perceived by the government, the private sector, and society, as mentioned by the directors and employees in table 5. On a deeper analysis, however, it is possible to understand that focusing on issues that bring an incredible amount of credit and little blame is an effective way to increase reputation (Hood, 2010). This notion is exceptionally congruent with the opinion of another director. According to this director, the fear that the ANP regulations would be challenged in court, which would negatively affect the agency's power, meant that measures to promote competition were avoided. Therefore, hypothesis 6 is confirmed since could be noted that concerns about reputation shaped the action of the ANP in relation to promoting competition in the refinery sector.

Table 5. Percentage of respondents who believe that the ANP has a high-class reputation among the stakeholders (industry, government, and society)

Respondents	Not High-class	High-class	Not answered
Directors	0%	100%	0%
Employees	17%	77%	6%

Source: own elaboration.

6. Conclusion

The last three decades have witnessed the rise of the regulatory state as proposed by Majone (1997). In this context, independent regulatory agencies began to play a pivotal role in the organization of the state, becoming a hallmark of a new economic system. However, the numerous crises that some regulated sectors have gone through in recent years resurrected criticism of regulatory activity. In this sense, analyzing the causes of regulatory disasters to identify the causes of regulatory failures and provide insights for improving the system has become a necessity. Hence, aiming to contribute to what is state of the art in regulation, this article focuses on examining the regulatory failures that emerged from promoting competition in the refinery sector and contributed to the 2018 truck drivers' strike in Brazil.

Following the most influential and the most recent literature on the subject, five hypotheses segregated between internal and external failures were proposed. The main findings suggested that the lack of independence meant that the ANP made no critical effort to seek a more competitive refinery sector. Nevertheless, several internal coordination problems and poor decisions taken by political bureaucrats were also determinants for regulatory ineffectiveness. The research made it clear that the promotion of competition in the refinery sector was not among the institution's priorities. One of the reasons these activities were passed over stems from misperceptions about the division of labor between and within the organization. In addition, the passive culture of the agency and the search for audiences that would support the institution can be used as explanations.

In promoting this in-depth analysis of the determinants of regulatory ineffectiveness of the ANP, this study makes valuable contributions to the field of regulatory studies. Regarding capture theory, it is shown that regulatory capture is not the only source of regulatory failures (Coglianese, 2016). Furthermore, although it appears plausible in numerous cases, its diagnosis can only be determined through statistical correlation inference, which is often not possible due to a lack of data (Carpenter & Moss, 2013).

Regarding the independence of agencies, this study is congruent with Eyre's (2016) view that governments have been trying to reinsert themselves in the regulatory space, especially on issues that are sensitive political issues, such as energy. Nevertheless, in the Brazilian context, there is no reason to believe the independence of agencies has remained intact in this new dynamic of malleable boundaries. Concerning the administrative malaises inherent to any public organization, it is possible to affirm that the lack of coordination between and within regulators and the problem of attention bias are largely responsible for the blunders and failures of regulatory agencies. Consistent with the findings of Bach and Wegrich (2019), it has been shown that several biases in organizational attention operate in a complementary manner.

Finally, despite the contributions of this article to the literature, some limitations need to be mentioned. First of all, understanding that regulatory agencies are just one of the several actors that inhabit the complex regulatory space, the option to interview only former ANP directors brings some drawbacks. A second limitation of the study is concerning the application of the questionnaire only to the current technical staff of ANP, which began to be formed in 2005. In summary, one should be aware that further research could broaden this case study by including these other relevant aspects, which may subtly alter the causal relationships drawn here.

References

- Allison, G. T., & Morton, H. H. (1972). Bureaucratic Politics: A Paradigm and Some Policy Implications. *World Politics*, 24, 40–79. <https://doi.org/10.2307/2010559>
- Bach, T., & Kai, W. (2019). Blind Spots, Biased Attention, and the Politics of Non-Coordination. In T. Bach, & K. Wegrich (Eds.), *The Blind Spots of Public Bureaucracy and the Politics of Non - Coordination* (pp. 3–28). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-76672-0_1
- Bachrach, P., & Morton, S. B. (1963). Decisions and Nondecisions: An Analytical Framework. *American Political Science Review*, 57(3), 632–42. <https://doi.org/10.2307/1952568>
- Baldwin, R., Martin, C., & Martin, L. (2012). *Understanding Regulation: Theory, Strategy, and Practice* (2nd ed.). New York: Oxford University Press.
- Bernstein, M. H. (1955). *Regulating Business by Independent Commission*. Princeton University Press. Retrieved from <http://www.jstor.org.gate3.library.lse.ac.uk/stable/j.ctt183pzkt>.
- Black, J. (2014). *Learning from Regulatory Disasters*. LSE Legal Studies Working Paper No. 24/2014. Retrieved from http://eprints.lse.ac.uk/60569/1/WPS2014-24_Black.pdf.

- Brasil, Agência Nacional do Petróleo, Gás Natural e Biocombustíveis. 2015. *Petróleo e Estado*. Rio de Janeiro: ANP. Retrieved from http://www.anp.gov.br/images/publicacoes/livros_e_revistas/livro-petroleo-e-estado-ANP.pdf.
- Braun, C. (2016). On the Size and Kind of Influential Stakeholder Communities and Regulatory Governance. In M. Lodge (Ed.), *Regulation Scholarship in Crisis* (pp. 8–14). CARR 84. London.
- Carpenter, D., & David, A. M. (Eds.). (2013). Introduction. In *Preventing Regulatory Capture* (pp. 1–22). Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9781139565875.002>
- Carpenter, D. P., & George, A. K. (2012). Reputation and Public Administration. *Public Administration Review*, 72(1), 26–32. <https://doi.org/10.1111/j.1540-6210.2011.02506.x>
- Carrigan, C., & Cary, C. (2016). *George J. Stigler, “The Theory of Economic Regulation”* (Edited by Martin Lodge, Edward C. Page, and Steven J. Balla., Vol. 1). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199646135.013.41>
- Coglianesse, C. (2016). Why It Is Hard to Attribute Regulatory Crises to Capture. In M. Lodge (Ed.), *Regulation Scholarship in Crisis* (pp. 18–21). CARR 84. London.
- Dearborn, D. C., & Herbert, A. S. (1958). Selective Perception: A Note on the Departmental Identifications of Executives. *Sociometry*, 21(2), 140. <https://doi.org/10.2307/2785898>
- Director 1. 2021. Promotion of competition in the refinery sector in Brazil Interview by Marcelo Meneses.
- Director 2. 2021. Promotion of competition in the refinery sector in Brazil Interview by Marcelo Meneses.
- Director 3. 2021. Promotion of competition in the refinery sector in Brazil Interview by Marcelo Meneses.
- Director 4. 2021. Promotion of competition in the refinery sector in Brazil Interview by Marcelo Meneses.
- Director 5. 2021. Promotion of competition in the refinery sector in Brazil Interview by Marcelo Meneses.
- Director 6. 2021. Promotion of competition in the refinery sector in Brazil Interview by Marcelo Meneses.
- Director 7. 2021. Promotion of competition in the refinery sector in Brazil Interview by Marcelo Meneses.
- Director 8. 2021. Promotion of competition in the refinery sector in Brazil Interview by Marcelo Meneses.
- Director 9. 2021. Promotion of competition in the refinery sector in Brazil Interview by Marcelo Meneses.
- Director 10. 2021. Promotion of competition in the refinery sector in Brazil Interview by Marcelo Meneses.
- Director 11. 2021. Promotion of competition in the refinery sector in Brazil Interview by Marcelo Meneses.
- Eyre, S. (2016). What Brings the Government Back in? Comments on the Notion of Boundaries and Independent Regulation. In M. Lodge (Ed.), *Regulatory Agencies under Challenge* (pp. 17–20). CARR 81. London.
- Gieve, J., & Colin, P. (2012). Ideas and Coordination in Policymaking: The Financial Crisis of 2007–2009. *Governance*, 25(1), 61–77. <https://doi.org/10.1111/j.1468-0491.2011.01558.x>
- Gilad, S. (2015). Political Pressures, Organizational Identity, and Attention to Tasks: Illustrations from Pre-Crisis Financial Regulation: Regulatory Allocation of Attention. *Public Administration*, 93(3), 593–608. <https://doi.org/10.1111/padm.12155>
- Gilardi, F. (2002). Policy Credibility and Delegation to Independent Regulatory Agencies: A Comparative Empirical Analysis. *Journal of European Public Policy*, 9(6), 873–93. <https://doi.org/10.1080/1350176022000046409>.
- Hood, C. (1994). *Explaining Economic Policy Reversals*. Open University Press. Retrieved from <https://books.google.co.uk/books?id=M4diQgAACAAJ>
- Hood, C. (1974). Administrative Diseases: Some Types of Dysfunctionality in Administration. *Public Administration*, 52(4), 439–54. <https://doi.org/10.1111/j.1467-9299.1974.tb00196.x>
- Hood, C. (2010). The Blame Game: Spin, Bureaucracy, and Self-Preservation in Government. *The Blame Game: Spin, Bureaucracy, and Self-Preservation in Government*, November.
- King, R. (2007). Regulation as a Mode of Governance. In *The Regulatory State in an Age of Governance*, 3–33. London: Palgrave Macmillan. https://doi.org/10.1057/9780230591721_1
- Koop, C., & Martin, L. (2014). Exploring the Co-Ordination of Economic Regulation. *Journal of European Public Policy*, 21(9), 1311–29. <https://doi.org/10.1080/13501763.2014.923023>

- Lodge, M. (2019). Accounting for Blind Spots. In T. Bach, & K. Wegrich (Eds.), *The Blind Spots of Public Bureaucracy and the Politics of Non - Coordination* (pp. 29–48). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-76672-0_2
- Majone, G. (1997). From the Positive to the Regulatory State: Causes and Consequences of Changes in the Mode of Governance. *Journal of Public Policy*, 17(2), 139–67. <https://doi.org/10.1017/S0143814X00003524>
- Mendes, A. P. A., Cássio, A. N. T., Marco, A. R. R., & Haroldo, F. P. (2018). *Mercado de refino de petróleo no Brasil*. BNDES Setorial. Rio de Janeiro: BNDES.
- Stigler, G. J. (1971). The Theory of Economic Regulation. *The Bell Journal of Economics and Management Science*, 2(1), 3–21. <https://doi.org/10.2307/3003160>
- Vibert, F. (2016). Independent Agencies: No Fixed Boundaries. In M. Lodge (Ed.), *Regulatory Agencies under Challenge* (pp. 4–16). CARR 81. London.
- Wilson, J. Q. (Ed.). (1980). *Politics of Regulation*. New York: Basic Books.

Note

Note 1. Besides the construction of the “Refinaria Henrique Lage” (owned by Petrobras) in 2014, two other small refineries were created since 1998: the “Univen Refinaria de Petróleo”, in 2007, and the “Dax Oil Refino”, in 2008.

Acknowledgments

I am immensely grateful to the directors and employees of the Brazilian National Agency of Petroleum, Natural Gas and Biofuels, who generously dedicated their time to participate in this study.

Authors contributions

“Not applicable.”

Funding

“Not applicable.”

Competing interests

The opinions expressed in this article are the author's own and do not reflect the view of the Brazilian National Agency of Petroleum, Natural Gas and Biofuels.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Canadian Center of Science and Education.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.