# **Regulation and Regulatory Capture**

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## Abstract

Regulation exists to correct the negative effects of market failures, on the well-being of consumers and of the society, as a whole. One major problem is that regulatory action may be impaired by the existence of interest groups that seek to condition regulators, so that they make decisions favorable to their goals. We present and discuss the different economic theories that provide insights into the problem of regulatory capture including, e.g., interest group theory, toll (corruption) theories, information asymmetry and the principal-agent theory. We present several forms in which regulatory capture may occur, including financial capture and cultural capture. In the final two sections, we discuss how to mitigate the risk of regulatory capture by interest groups of a regulated sector or industry.

## **Keywords: regulation, regulatory capture, interest groups**

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# 1. Introduction

When there are failures in the functioning of markets that prevent the maximization of social welfare, it is often necessary to resort to regulatory actions that correct the effect of these failures, promoting the best possible result from the point of view of society. To this end, the goal of legislators and regulatory agencies must be focused on promoting the common good, protecting the interests of consumers and citizens in general.

In practice, however, regulatory agencies have delegated powers. They are thus subject to agency problems, and regulators are subject to economic incentives that can encourage them to make decisions that are not wholly consistent with the interest of the society, favoring the interests of firms in the regulated sector instead. When this occurs, we have the so-called regulatory capture, which can be defined as a process by which regulated firms influence and manipulate the decisions of the authorities that supposedly supervise the economic activity developed by them (Dal Bó, 2006).

The present article is structured as follows: in section 2 we begin by contextualizing regulation, based on the theory of public interest, as a promoter of economic efficiency (a proper allocation of resources in the economy and social well-fare in the context of market failures). Then, in section 3, we discuss the existence of a problem of efficiency in the implementation of the regulation process, leading to a further discussion of several theories that seek to explain the problem of regulatory capture by interest groups, with special emphasis on regulated firms. Section 4 examines the ways in which regulatory capture can materialize, with a more exhaustive analysis of cultural capture, dominant in the most developed economies, while referring to financial capture as more descriptive of the reality of countries with more fragile political systems. Section 5 discusses some of the measures that may contribute to reducing the risk of regulatory capture in its multiplicity of manifestations. Finally, in section 6, we draw conclusions.

#### 2. Economic regulation

From a broad perspective, economic regulation encompasses all forms of state intervention in the economy (Dal Bó, 2006). However, a more specific and more common definition of economic regulation presumes significant state intervention in industries with market power or that produce "essential" goods or services, with the aim of increasing social welfare. Wilson (1974) argues that the concept of regulation can result from political motivations such as the desire to distribute wealth or from economic motives such as limiting monopoly power. Whatever the reason, political or economic, regulation is a process that derives from a variety of causes and exists to meet a particular goal.

The original public interest theory was the standard economic thinking on regulation from the late nineteenth century until the late 1960s. This theory is based on two basic assumptions. Firstly, markets are extremely fragile and likely to work inefficiently if we let them operate autonomously. Secondly, government regulation can correct these shortcomings, i.e., it can compensate for social welfare losses associated with market failures. The idea is that regulatory agents, when adopting regulatory measures, reduce or eliminate the inefficiencies generated by market failures (McCraw, 1975).

On the basis of these assumptions, one could argue that the main public interventions in the economy (protection of trade unions, regulation of utilities and natural monopolies, subsidies to agriculture, minimum wages, price and quantity control, etc.) were simply the government's response to the public need to rectify the inefficiencies resulting from the free functioning of markets (Posner, 1974). Behind each regulatory scheme, a market imperfection could be discerned, the existence of which provided a justification for such regulation, which was believed to operate effectively.

Public intervention requires, therefore, the identification of market anomalies and the definition of a corrective policy of those failures (Pigou, 1932). In this sense, and in the traditional economic logic of regulation, market structures characterized by monopolies or oligopolies pose problems of various orders due to the existence of market power, which must be mitigated. These types of markets are commonly associated with static inefficiencies – monopolies create inefficiencies, charging prices

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well above marginal costs, which translates into abnormal profits by firms and a level of production below the socially desirable – and dynamic inefficiencies – monopolists have no incentive to invest in technological innovation or in the improvement of their products or services, which restricts productivity gains for the economy.

The existence of externalities has also been always relevant in economic regulation. The key issue here is the impact on economic agents that results from firms and/or individuals taking action that only takes into account their private benefits and costs, instead of the social benefits and costs. In these cases, the goal of regulation is to make firms incorporate externalities (positive or negative) into their cost functions, ensuring an optimal allocation of resources in the economy.

Economic regulation, viewed from this perspective, promotes productive efficiency and an adequate allocation of resources, while allowing conditions for the viability and financial sustainability of the regulated firm and the protection of consumers from market power abuse by monopoly sectors (Laffont, 2005).

## 3. Economic theories of regulatory capture

The main criticism of public interest theory and the benefits of regulation is that the existence of regulation does not in itself ensure that the objectives it pursues are met, in particular because regulators are permeable to private interests. A reformulation of the theory considers that the poor performance of the regulation process is not a consequence of a mismatch of the objectives to be attained, or of the inadequacy of the process itself, but of the insufficient performance of the individuals or of the procedures that implement the regulation. The arguments for poor performance thus refer to another issue that emerges from the existence of regulation - that particular interests may affect the regulator's performance, i.e., the so-called regulatory capture may occur. In this perspective, despite the efforts of the regulatory mechanisms to avoid the abuse of monopoly power, regulation is eventually captured by the firms that are subject to regulation.

The theory of regulatory capture has evolved into several versions. Yet, it is common to all of them that economic regulation is a process by which interest groups seek to promote their private interests. One version of this theory stems from political science, particularly from the works of Bentley (1908) and Truman (1951), who emphasize the importance of interest groups in shaping public policy. In this analysis, it is expected that a specific interest group - the regulated firms - prevails in the dispute to influence the legislation. The original objectives of a regulatory process fade through lobbying by interest groups. Over time, regulated firms gradually gain control over the agencies that regulate them.

In a more theoretical approach, regulatory capture occurs when groups of individuals or firms that, having an interest in the outcome of regulatory policy decisions, direct their efforts and affect their resources in seeking to achieve the desired outcomes of those policies. At the same time, ordinary citizens, each with only a marginal interest in these policies, show no great concern in influencing their determination. In this context, it is possible to establish more precisely the concept of regulatory capture, which is connected to success in influencing (capturing) legislators or regulatory agencies, so that policies and legislation preferred by regulated firms are implemented.

## **3.1. Regulation market**

The economic theory of regulation is initially proposed by Stigler who, in 1971, introduces a new view on regulation. At first glance, this theory appears to simply be a refined version of the theory of regulatory capture. It insists, after all, on an idea originally from political science, that economic regulation serves the particular interests of politically influential groups. However, a new and important aspect is introduced by this author: the idea that economic regulation can be seen as a product whose optimal allocation derives from the operation of the laws of demand and supply. Stigler (1971) emphasizes that traditional mechanisms for obtaining monopoly rents, such as product differentiation, vertical integration, and other forms of barriers to entry, are less efficient ways to gain benefits than to use their power to influence legislators or regulatory agencies to obtain "legal" protection against competition. Thus, in contrast to the public interest theory of regulation, Stigler's view is that regulation serves the private interests of regulated firms. His reasoning is based on the hypothesis that regulated firms may use the Government's coercive public power to establish laws and regulations that allow them to obtain private benefits.

The economic theory of regulation thus includes a political dimension in the analysis of the formulation of regulatory policies. The offer of regulation would be made by legislators, who in turn are modeled to maximize political support for the next election by mobilizing voters and obtaining economic support for election campaigns. In this sense, regulation can be seen as an economic good for which there is a supply and demand market in which legislators offer regulation and interest groups seek regulation that favors them.

## **3.2. Interest group theory**

Stigler's (1971) analysis focuses on the firm as the only entity with influence on regulatory capture, not analyzing the prospect that various, sometimes antagonistic, interest groups simultaneously press into competition to make their interests prevail. For example, trade unions are opposed to corporate pressure, leading to the resulting regulatory policy not only reflecting corporate influence. This different perspective is later developed by Peltzman (1976), Posner (1971, 1974, 1975) and Becker (1983) and translated into the interest group theory.

These theories of regulation are based on the idea that the defense of corporate interests requires investment in the lobbying activity, which will only happen if they are profitable, i.e., if they give rise to benefits. This activity, however, faces a free rider problem. Small groups have advantages over larger and less organized groups, such as consumers. The smaller the group, the greater the benefit for each member and the greater incentive there is for the group to remain active and invest in the realization of its interests (Olson, 1965). The homogeneity of interests is also relevant because it facilitates consensus and makes it less likely that the common position will disadvantage any member, discouraging them from abandoning the group.

Peltzman (1976) perfects the economic theory of regulation by introducing the notion that no economic interest captures legislators or regulatory agencies with exclusivity. This author develops a model in which legislators make regulatory decisions in order to maximize votes. The null hypothesis is that legislators have an objective function where they seek to maximize the support of various pressure groups in society: from consumers, keeping prices as low as possible, and from industry firms, ensuring the highest possible profit. The author assumes that legislators, framing their

decision by this trade-off, will choose the regulation policy that guarantees the maximization of political support. Therefore, it is not probable that regulation benefits exclusively the regulated firms. Some consumer groups will also be able to organize themselves efficiently. Thus, the problem for legislators and regulatory agencies is to determine the efficient level of regulation, which translates into an optimal balance between the various interest groups in society, while at the same time maximizing political support.

Incorporating these later developments in the literature, Peltzman (1989) summarizes the main theoretical contributions of the economic theory of regulation. First, compact and well-organized interest groups tend to benefit more from regulation than broad and diffuse groups, which creates a bias in favor of regulated firms, usually better organized than consumers. Second, regulatory policy will seek to preserve an optimal distribution of incomes among this set of interest groups. Third, since the political benefit of regulation results from the distribution of wealth, the regulatory process is sensitive to efficiency losses. Thus, policies that reduce the total value of wealth available for distribution among interest groups will tend to be avoided.

#### **3.3. Regulation and corruption**

De Soto (1989) and Shleifer and Vishny (1994, 1998) introduce new ideas into interest group theories, formulating the so-called toll theories. These theoretical contributions highlight the benefits that legislators and regulatory agencies can gain by having a monopoly position that allows them to create inefficient laws and regulations, extracting revenues from regulated firms through bribes or campaign contributions. In this view, legislators and regulators are not merely passive actors who are captured by interest groups. They have an active stance in providing regulatory advantages to potential interest groups. The problem of corruption is here dealt more explicitly than in previous analyzes. To gain benefits, interest groups pay "tolls" to legislators and regulatory agencies. In these theories, corruption is seen as the only way to be able to do business, i.e., to develop and thrive in the face of "unfair" or "inefficient" laws and regulations, often used by firms operating in developing countries, where this theory finds greater validation. Corruption of legislators or regulatory agencies is, in this perspective, seen as a way of overcoming inefficiencies in regulation. Rose-Ackerman (1999) considers that the argument that corruption is justified by "unfair" or "inefficient" laws and regulations is unacceptable and that such conduct would not normally be tolerated in developed countries. And even less, that corruption is acceptable as a way to increase the profits of regulated firms. The author states that some regulation will certainly be inefficient, and that some lawmakers and regulators actively seek corruption, but no corrupt action is justified, partially because it would be impossible to clearly define where the line of separation between "fair" and "unfair" laws should be.

## **3.4. Other theories**

Laffont and Tirole (1991, 1993) develop a normative theory of regulatory capture, based on information asymmetry and the principal-agent theory. In the absence of such asymmetries, regulated firms would not be able to obtain rents, and a regulatory capture theory based only on the pursuit of benefits by regulated interest groups, would not be sufficient. Thus, as in toll models, the private interests of legislators and regulators needs to be taken into account. In the Laffont and Tirole (1991, 1993) model the regulatory agency supervises the prices and rates of return of regulated firms. While the regulatory agency has the time and resources to discover the true nature of the regulated firm, i.e., whether it is efficient or inefficient, the legislators (the principal) have to rely on the information provided by regulators. In this context, it is possible that the regulatory agency may omit information from legislators and obtain economic advantages from collusion with the regulated firm, if that firm benefits from the retention of information.

Another explanation for regulatory capture is given by the regulatory life cycle theory of Martimort (1999) and Estache and Martimort (1999). These authors argue that when the regulatory agency is young, it tends to be under tight scrutiny on the part of legislators and the general public. Over time, scrutiny is reduced, and the agency receives less public attention, reducing consumer pressure on issues of regulatory effectiveness. Meanwhile, pressure from the interest groups of regulated firms remains high, which translates into a growing risk of regulatory capture over time.

Zingales (2013) further points out that regulatory capture may occur as a consequence of the regulatory agency being able to protect itself against any mistakes it

may make. If the regulator makes a mistake that harms the regulated firms, the consequence will be that regulated firms will complain strongly. On the other hand, if the error is detrimental to consumers, the most normal situation is that this error will not be noticed. In this context, it makes more sense for the regulatory agency to take fewer risks, making decisions that do not tend to harm regulated firms.

Having addressed the main theoretical issues related to the economic theory of regulation, we are now in a position to discuss, in the next section, the different forms that regulatory capture can take.

## 4. Forms of regulatory capture

At another level of analysis, the identification of the moment at which the regulatory capture occurs is pertinent. In this sense, it is possible to distinguish between ex-ante capture and ex-post capture. An ex-ante capture is defined as the set of influences that are exercised in the process of defining the rules and regulations, i.e., this type of capture occurs when regulated firms are able to influence the legislation and regulation to their benefit, before it takes effect. Participation in the definition of rules has the clear advantage that those rules, when adjusted to private interests due to private interest groups' participation in their definition, can be respected without the need to affect additional resources and efforts to try to subvert unfavorably defined rules. This type of capture corresponds to high-level corruption, at the level of politicians, legislators and other state agents. However, the ex-ante capture is also carried out at a more operational level, namely at the contractual negotiation level, with the same objective: to obtain higher gains. The legal legitimacy that follows the signing of the contracts does not invalidate the hypothesis that its clauses could have been defined through the exercise of influence by interest groups and, possibly, by means of acts of corruption.

In turn, ex-post capture seeks to influence regulatory agencies with the goal of avoiding compliance with existing rules and regulations, possibly through bureaucratic corruption. This type of capture may also involve legislative corruption if the influence exerted seeks to change existing laws and rules through renegotiation processes that favor the regulated industry. Another relevant issue is to discuss the ways and means by which the industry or regulated sector captures the respective regulatory agencies. In this discussion, two forms of capture are considered: (i) The materialistic capture or financial capture occurs when the motivation of the regulatory agent is of a material nature, and may result from bribes, contributions and political donations, or from the desire to maintain a high level of funding by the State; (Ii) Non-materialistic capture, also called cultural capture, is evidenced when the regulator begins to think like the firms in the regulated sector, reflecting a strong social identification with it. In this case, the regulator is not materially corrupted; it accepts the influence, values and interests of regulated firms, which he believes are convergent with the interests of consumers and society.

## 4.1. Financial Capture

Some aspects related to financial capture are developed by Boehm (2007). For this author, the principal-agency theory is adequate to analyze the corrupt relationships that can be established between regulators and regulated firms. In its model, the author postulates that four types of agents must be recognized: (i) consumers, or citizens; (ii) the legislative power, i.e., politicians; (iii) executive power, which in this case are regulatory agencies, or regulator; and (iv) regulated firms. The regulator must make decisions taking into account the interests of consumers, but they are not directly involved in the regulation process. They are instead passive agents, because the regulator does not respond to consumers, but to politicians, who may be corrupted. In the relationship between legislators and regulatory agencies, Boehm (2007) states that the greatest risk results from the asymmetry of information, favorable to the regulator, as described by Laffont and Tirole (1991, 1993). The regulator may omit or change the information it makes available to politicians regarding regulated firms, which means that it also escapes indirect control by voting citizens. The regulatory agency may have an incentive to defraud politicians, for example, to secure a larger annual budget. Or, even more relevant, this capacity allows the establishment of corrupt relations between the regulator and the regulated firms. Regulated firms may explicitly bribe or assign benefits such as conference travel, study funding that supports industry-friendly decisions, or promises of future employment opportunities in the regulated industry. Regulated firms can also promote regulatory agency decisions that are favorable to their interests by providing incorrect information, for example by manipulating accounting or reporting information. The advantage of this behavior for the regulated firm is that it only runs the risk of detection (for sending incorrect information), and it avoids getting involved in situations of greater risk, such as active corruption of regulators. Another problem is the existence of asymmetries of information within the regulatory agency itself. Detailed information about regulated firms is collected and processed by a small group of technical experts, and sometimes by a single individual. This information is analyzed and transformed into summary reports, sent to the hierarchical superiors, which means there is an opportunity for the manipulation of the information, since the costs of verification of said information would be high. A favor from one of these expert technicians, who can hide or manipulate information, would be very difficult to detect. Finally, politicians and regulators may abuse their power to make laws and regulations, in order to gain benefits from regulated firms.

## 4.2. Cultural capture

However, one must recognize that these problems, as well as materialistic capture through corrupt processes, tend to be more relevant in countries with authoritarian political systems or fragile democracies. In countries with higher levels of economic and social development, materialistic capture is hampered, and non-materialistic regulatory capture tends to be more relevant, particularly in sectors and industries requiring high technical expertise.

Regulatory agencies generally require specialized knowledge about the industry to be regulated. Of course, individuals who know the industry best tend to be those who work in this industry, including technicians, operators, scientists and managers. One can work a few years in an industry, then a few years in the regulatory body of that industry and later return to work in a regulated firm, which has been termed the "revolving door" problem. If the "revolving door" problem is real, the question is whether regulators are concerned with serving the public, defending the interests of consumers, or whether they are more closely linked to the interests of the firms that employed them, or will do so in the future. Dal Bó (2006) argues in this sense, namely that the fact that many regulators come from the regulated industry or end up working for this industry has long been believed to be a source of disturbance to the quality of regulation. Zingales (2013) identifies the concerns of regulators regarding their careers as one of the important channels for regulatory capture. Normally, the remuneration of regulatory agents tends to be lower than the remunerations of the technical staff and managers of regulated firms, so the regulatory agents have an economic interest in being offered employment proposals. From the perspective of the regulated sector, if a firm wants to hire a regulatory agent to take advantage of its capabilities and knowledge, it is normal that it shows preference for agents that revealed, through their actions, a greater identification with the interests of the regulated firms. Therefore, it is in the interest of the regulator to signal this identification with the interests of the regulated sector.

Some authors, such as Kwak (2014), argue that in some industries, the problem of regulatory capture is best explained by a cultural perspective - where regulatory agents identify with the industry - rather than by the principal-agent theory (Laffont et al. Tirole, 1991 and 1993), whereby regulators are seduced by bribes, lobbying, job opportunities and other benefits, into compromising their principles and consciously abandoning their duty to serve the public interest. In this cultural capture perspective, the regulatory agent does not compromise its principles, but its actions and beliefs tend to be strongly aligned with the interests of regulated firms, continuing to believe that they are consistent with the public interest.

So instead of finding regulatory agents who consciously act in the best interests of regulated firms, we are more likely to find well-intentioned regulators with past professional experience in the regulated sector, that tend to see industry concerns as legitimate and conducive to greater social welfare, because these are the concerns that they themselves are most familiar with. For example, the actions of the various regulators of the US financial system, which resulted in major deregulation, may not have been deliberately taken to benefit banks, but based on the belief that such deregulation would be conducive to growth in markets, the economy and favorable to consumer interests.

In order for cultural capture to take place, the regulatory agent must demonstrate some degree of alignment with the industry or regulated industry, be it conscious or unconscious alignment. The risk of regulatory capture increases when regulators have close relationships with industry, personal and professional affinities with people working in regulated businesses, and when they have regular working and negotiating meetings. In these cases, the regulatory agent may feel more identified with the regulated firms, and he internalize the objectives, norms and values of the industry through a process of social identification (Buiter, 2009; McPhilemy, 2013).

Kwak (2014) points out that cultural capture is stronger when: (i) there is a high degree of similarity between representatives of the regulated industry and regulators; (ii) the regulated industry has a particularly relevant social purpose, with which regulators can identify with; (iii) the industry has a high social, cultural or intellectual status, when there are many interconnections between industry and regulators; and (iv) matters to be regulated are technically complex. According to the author, all these criteria apply, for example, to the financial sector, which is one of the best examples of the risk of cultural capture. In financial services, responding to the growing complexity of this sector, regulators seek to attract and hire people who have in-depth knowledge of how banks, insurers and financial markets work, which is necessary for effective monitoring of this sector (Benink & Schmidt , 2004).

Particularly relevant to the functioning of the regulatory agents of the financial sector is the personal categorization that they attribute to themselves. The eventual social identification with the financial sector will lead regulators to integrate characteristics and adopt behaviors that are typical of this sector, which is characterized by very strong social norms (Nicholson et al., 2011). Dal Bó (2006) concludes that regulatory agents previously employed in the financial sector are more likely to demonstrate greater permissiveness. Riketta (2005) shows that prior working time in a regulated firm is positively correlated with the degree of identification with that firm. As a corollary, the longer regulatory agents have worked in the financial sector, the more likely they are to identify with this sector.

In addition, it is also expected that the phenomenon of regulatory capture will be particularly strong in the financial sector, where there are conflicts of interest between financial firms, which aim to maximize profits, and regulators wishing to provide greater consumer protection and stability (Benink & Schmidt, 2004).

## 5. How to reduce the risk of regulatory capture

Considering the complexity of the problem and the different forms and motivations for regulatory capture, strategies for mitigating the risk of regulatory capture require a multiple approach method, with several mutually complementary measures, and a very serious attitude towards regulation (Baxter, 2011).

Firstly, the principal-agent theory provides the framework for some measures to combat bad incentives, increasing the costs of corruption and reducing the benefits that could result from illicit activities and decisions. This should include the implementation of control mechanisms, sanctions and rewards, taking into account the potentially perverse effects of such measures.

Secondly, it must be acknowledged that the autonomy of the regulatory agency has advantages and disadvantages. On the one hand, the discretion of regulation should be reduced to a minimum, to reduce the possibility of corrupt relations. On the other hand, the autonomy of the regulator ensures greater protection of regulated firms from possible interference by political powers. It is therefore necessary to find a balance that, by limiting discretion, does not compromise the independence and autonomy of the regulatory agency.

Boehm (2007) believes that the best way to achieve this balance is through increased transparency and accountability of regulatory decisions and processes. Greater transparency also helps reduce the information asymmetries between the regulator and politicians, and between the regulator and the regulated firms. This author proposes a set of anti-corruption measures that can mitigate the risk of materialistic regulatory capture, including: (i) promoting the rotation of regulators in vulnerable positions, making it difficult to create and maintain corrupt relations; (ii) regulated firms should always be visited in teams of at least two technicians and, if possible, with team rotation; (iii) relations between regulators and regulated firms should be kept as anonymous as possible; (iv) regulatory agents should be barred from working for the industry or regulated sector for a period of time; (v) the regulatory agency should be staffed by technical staff in adequate quantity and quality, and the use of external expertise should be exceptional; (vi) introduce rules to encourage anonymous complaints, and protect whistleblowers.

Baxter (2011) states that the different forms of mitigation of regulatory capture may include: (i) ensuring the participation of groups representing the interests of consumers in the regulatory process; (ii) limiting the size and hence the influence of regulated firms; (iii) implementing duly structured regulatory agencies with adequate, well-paid resources and clearly defined missions. As far as cultural capture is concerned, the reduction of the risk of such capture involves the reduction of the social identification of regulators with the regulated industry. One way to achieve this is to increase their identification with their role as regulator, enhancing their professional identity. Berry (1979) points out that regulatory agencies are less susceptible to regulatory capture when they have higher budgets and restrictive recruitment policies, which the author views as a proxy for the regulator's professionalism. Thus, reinforcing the professional identification of regulators is a way of combating their personal and social identification gives clear benefits to an organization's employees, this is not true in the case of the regulatory process, where maintaining mental independence is crucial to the performance of that function. In regulating the financial sector, for example, the most important quality that the regulator must have is precisely this mental independence, which is necessary for it to be able to objectively evaluate and monitor the performance of regulated firms and institutions.

Consequently, regulatory agencies should actively pursue policies aimed at reducing social identification with the regulated sector, especially for their technicians and policy makers, who have previously worked in the regulated industry. This can be achieved by stimulating their professional identity as regulators, including training actions, integration into professional groups, and participation in regulatory associations.

Veltrop and Haan (2014) agree that this is the most effective way of tackling the harmful effects of regulators' social identification with the regulated sector and criticizes some of the measures that have been put forward to combat regulatory capture. For example, they point out that the imposition of periods of impediment to limit the problem of "revolving doors" (as Pagliari, 2012 points out) is not effective in mitigating the social identification of regulators with the regulated industry. And that social identification is also not affected during the exercise of the regulation mandate, nor for its duration. On the contrary, limiting mandates, and shortening their duration, can help to make regulation more lenient because regulators will be keen to maintain a favorable reputation if they plan to return to the regulated sector after completing their mandate.

## 6. Final considerations

In this work, we tried to systematize the main issues related to regulatory theories and regulatory capture, presenting a set of studies, with differentiated contributions.

Regulation is linked to market failures and exists to alleviate the negative effects on the well-being of free market functioning in some sectors of activity. However, the achievement of regulatory objectives can be jeopardized by the existence of interest groups that seek to condition regulatory action so that regulators can make decisions favorable to the goals of these interest groups. This analysis has highlighted the problems associated with regulatory capture and that, consequently, undermine the effectiveness of regulation.

In conclusion, it is important to recognize that different interest groups influence the regulatory process. What needs to be ensured is that none of these interest groups can achieve a disproportionate level of influence. In practical terms, it is necessary to put in place mechanisms and incentives that make public interest groups more active in the regulatory process, and in negotiations between regulatory agencies and regulated firms. At the same time, regulatory agencies should have clear missions, should promote transparency and participation of the various interest groups in public discussions and negotiations, be provided with adequate human and financial resources, adequately remunerate their expert technicians and promote their professional identity as regulators, to reduce their social identification with the regulated sector, and the risk of capture.

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