

The Role of Human Resources and its Importance to the Performance of a Regulatory Agency

Adriano Pinto Pereira

1. Introduction

For many years, Brazil has been dependent on the state as the main drive for its economic growth. As a former European colony, it can be seen also as a country founded and built around the state and, in a very different way from the former Spanish or British colonies in America, there is not a violent moment in its history that can be considered a rupture in this path. In fact, it is unique, as Brazil has bought its independence, assuming as its own Portugal's debt with England.

Considering such history, many of our economic history, past and recent, can be seen as how the Brazilian society deals with the state. How some groups count on the state, or depend of the state to be prosperous or to survive, how the society deals with a multitude of incoherent decisions, contradictory laws, arbitrary rules and obscure decisions regarding economic issues. How a market economy fights to be built in a sometimes still mercantilistic society. In this way, studying regulation in Brazil can also be seen not only as the study on how a free market has its failures fixed by some sort of state intervention, but also how an economy moves from a state-owned situation to a less controlled one.

2. The Brazilian State in the 1990's

The oil crisis from the 1970's was a threat, but also an opportunity for many countries. The rise in oil prices was also a moment of concentration of wealth in the hands of a few, the oil-exporter countries, and such money, which became known as the "petro dollars", was lent at low interest rates to various countries, Brazil included. Used to pay oil imports, it allowed the Brazilian economy to keep its pace, and to sustain a high rate of growth for almost a decade, in what was then called the "Brazilian miracle". But things changed radically, and for worse, at the beginning of the 1980's, following the second oil shock (1979) and the raise in the US interest rates. As a result, many countries defaulted in his payments, starting by Mexico in 1982, in what is known as the "debt crisis" of the third world.

To make things a little worse, Brazilians approved a new constitution in 1988, creating new rights, and extending old ones to a huge number of citizens regardless, or with little concern, to financial aspects. As a result, the capacity of investment of the Brazilian federal government was reduced drastically. The 1980's become the "lost decade". In the 1990's was then verified a change in its posture. The Reagan and Thatcher administrations resulted in a serious questioning about the role of the state and in which ways it should (or should not) intervene in the economy. This change in the academic thinking soon reached Brazilian shores. Now it seemed that this role could be different. Allowing free enterprise in areas that were public-owned now started to be seen as an way to attract private investment, as an way to compensate the lack of public spending. Besides this opportunistic view, it was also a chance for some critical thinking about the role of the state, a window for a different view, more favorable to a free market perspective.

In this way, the "Master Plan of State Reform" (Brazil, 1995), presented by the president Fernando Henrique Cardoso and by the Minister of the Federal Administration and State Reform, Luiz Carlos Bresser Pereira, diagnosed a state crisis, marked by a "demand overload". The model of intervention posterior to the Great Depression of 1929, in which the state had a "strategic role in the coordination of the capitalist economy, promoting forced saving, stimulating economic development, correcting market distortions and guaranteeing a more equalitarian distribution of income", would be overcome. This state crisis would not be just fiscal (negative public savings and increasing difficulties of credit), but also of "exhaustion of the intervention strategy" (the import substitution industrialization) and related to what was called a crisis of the "bureaucratic way of public administration".

The resolution of the fiscal matter should involve an adjustment that allowed the Brazilian state to recover his capacity of defining and implementing public policies, considering there, besides the properly told fiscal adjustment, commercial liberalization, a privatization program (in which stood out the need to reorganization and invigoration of the regulation of the natural monopolies that were privatized) and a "publicization" program, understood as the transfer of competitive or non exclusive state services (as, for example, universities, hospitals, research centers and museums) to non state public sector companies, in a "partnership system between state and society for its financing and control", (...) "transforming the current public foundations in social organizations, in other words, in entities of private, non profitable right, that have specific

authorization of the Legislative Power to celebrate contracts with the Executive Power and thus have right to budgetary endowment”.

This change in the way the state intervenes would also pass by a reduction of its role as supplier of goods and services and a invigoration of its role as regulator and promoter of the services considered essential for the development of a democracy and for a better income distribution, like education and health (“human capital”).

According to FARINA et al. (1997:47):

“The modification in the state intervention pattern is an evident and global phenomenon that materializes as, but not only, the transfer of the ownership of public assets to private agents - what has been usually referred as privatization. In sectors known as public utilities (...) that active transfer process is particularly problematic, once it needs a new institutional framework so that the supply of public utilities by private agents can be done in an efficient way”.

Destatization is not limited to the transfer of ownership. It also involves another aspect, the control, faced now as a new form of state participation. A new law (8.987/95) was approved as a consequence of this new perspective, establishing general guidelines for the concession of public services. At the same time, the federal government proposed, and it was approved by the Congress, the creation of new federal regulatory agencies. As a consequence of the government's decision to attract private partners through concessions, it is essential the definition, in the contracts, of the terms and parameters of expected performance, which must reflect the public needs and goals, but also should be attractive for the investors. On the other hand, investors need to evaluate the risks involved in the business, as to make this kind of partnership possible. In this sense, the utilities privatization was an step in the direction of a free market, but it brought also characteristics from the past, as the oversight of the industry's performance. What was executed by the government now will be done by private companies, but monitored by regulatory agencies.

Concessions are not a novelty in Brazil. Since its beginnings, it has been used not only by the Portuguese kings, but also by the Brazilians as a tool to attract private savings. However, the

ways these contracts are established vary from time to time. The French Mercantilists of the 18th century, for example, defended that the government should have an active role in the promotion of the commerce and the industry. Economists as Adam Smith and John Stuart Mill defended small government interference in the private sector as the competition, a profit-seeking behavior and individuals defending their self-interests will serve to the public good. In the 19th century, however, severe critics to this vision were elaborated, motivated especially by the life conditions of the workers in the period. Exponents of this kind of reasoning are economists as Karl Marx and Robert Owen.

One common point, however, is the pursue of some meritorious objective, as the “common good” or the welfare in a society. According to STIGLITZ (1988), there are two fundamental theorems of welfare economics. The first of them affirms that, under some circumstances, a competitive market results in a Pareto-efficient allocation of resources. The second one affirms that a better income distribution in the society is obtained by the redistribution property rights, and not abandoning the market mechanisms (Coase theorem). In short, the first deals with efficiency in wealth generation; the second deals with wealth distribution.

3. State intervention

According to FARINA et al. (op. cit.) regulation can be divided into social and economic. Social regulation deals with situations where there are externalities and asymmetric information. Economic regulation deals with situations where there is monopoly power. State intervention is expected when the “market impersonal transactions system, only mediated by the prices, fails to provide an efficient allocation of resources”. Failures in the efficient allocation of resources carry to a reduction in the social welfare. There are a number of conditions that, most economists agree, may lead to inefficiency. They include:

- ? Imperfect market structures, such as a monopoly, monopsony, oligopoly, oligopsony, and monopolistic competition;
- ? Factor allocation inefficiencies in production theory basics;
- ? Market failures and externalities; there is also social cost;
- ? Price discrimination and price skimming;
- ? Asymmetric information, principal-agent problems;
- ? Long run declining average costs in a natural monopoly;

? Certain types of taxes and tariffs.

Failures in competition occur in some specific situations as of few companies with great market share (monopolies or oligopolies), without the existence of potential competitors, or products without nearby substitutes, in cases of high transportation costs or legally constituted monopolies (inclusive patents) and also in the presence of entry barriers. In these situations the so-called “market power” can occur. The presence of market power makes the economic outcome do not result exclusively from the impersonal forces of supply and demand. With market power, some agents are able to manipulate the results in its own benefit, obtaining the so-called “quasi-rent”. The classical examples are monopolized markets, in which there is only one supplier. In these markets it is expected that the price will be higher and the quantity smaller than in a competitive market. The main disadvantage of a monopoly situation is that it produces less and at a larger price, resulting in a loss of welfare by the society.

Wikipedia¹ points out an interesting distinction: a natural monopoly and a monopoly are not the same concept. A natural monopoly describes a firm's cost structure (high fixed cost, extremely low constant marginal cost). A monopoly describes market share and market power; the two are not synonymous.

Among the several aspects regarding economics of the public sector, the one that is of particular interest is the provision of utilities (by public or private agents). Utilities are often natural monopolies. In industries with a standardized product and economies of scale, a natural monopoly will often arise. In the case of electricity, all companies provide the same product, the infrastructure required is immense, and the cost of adding one more customer is negligible (up to a point.) Adding one more customer may increase the company's revenue and lowers the average cost of providing for the company's customer base. So long as the average cost of serving customers is decreasing, the larger firm will more efficiently serve the entire customer base. Johnson et al. (1996) when talking about the theoretical discussion on the economic characteristics of this services, points out:

“This polemic was particularly intense in the United States in the first decades of the 20th century and involved essentially two kinds of

¹ http://en.wikipedia.org/wiki/Natural_monopoly

arguments: The inherent ‘public interest’ of these activities (or, more properly, the fact that they are essential to the collectivity) and its characterization as ‘natural monopoly’ (in other words, an activity in which the existence of more than one producer is uneconomical)” (Johnson et al., 1996:6).

The North-American literature of the period presented, with small differences, the main characteristics that would define public utilities, namely:

- ? They supply an indispensable service, whose interruption provokes substantial damages;
- ? They are natural monopolies;
- ? They are subject to government control, in reason of their monopolistic character;
- ? They need enormous volumes capital; and
- ? They have economies of scale.

FARINA et al. (1997) still add the following characteristics:

- ? Separation between services generation and distribution;
- ? Network structure;
- ? Sunk costs; and
- ? Universal and inelastic demand.

In a broader sense, state intervention is usually justified not only by the market imperfections related to the supply of utilities, but also because of the existence of the so-called “public goods”. Public goods are those whose use is not possible neither desirable to ration. There are two main characteristics of public goods: nonrival consumption and nonexclusion. The first means that it can be consumed simultaneously by more than one person and consumption by one person need not diminish the quantity consumed by others. The second means that confining a good’s benefits to selected persons is impossible or prohibitively costly. Once nobody can be excluded from its benefits, hardly anyone would voluntarily pay for their provision. This is known in the literature as the “free-rider problem”. As a consequence, private markets may fail to provide it.

Another reason for state intervention is the existence of “externalities”. There are externalities when the actions of an individual or company affect other individuals or companies, imposing

costs (negative externalities) or generating benefits (positive externalities) that are not compensated by the market system. The result of these actions will be an inefficient allocation of resources, because the production of negative externalities will be bigger than it would be if the costs were attributed to the producer. In the same way, the production of positive externalities will be inferior to what would be produced if the benefits were rewarded. In such situations, the government can act by means of the legislation (regulation) or by the price system (fines or compensations). The common example is the production of pollution. It is not the intention from those driving automobiles to pollute the air that all breathe, but it occurs. The government can act imposing controls on the emission of pollutant and/or attributing costs (fines).

Another economic foundation for the presence of the government in the economy is related to the wealth distribution. The distribution of the produced wealth between the members of a given society can be extremely uneven, even when this society is producing goods and services in an Pareto-efficient way. Thus, a reason for government's action would be the promotion of a better income distribution. This is an important point to consider when talking of regulation. STIGLER (1988), for example, considers the income distribution as the main result of modern regulation.

An additional reason would be the perception that, even though properly informed, the evaluation of welfare by the individuals according to its own perception results in an inadequate criterion. Thus, the individual that, for example, smokes tobacco or refuses to use the seat belt would not need only to be informed of the consequences of his choices, but should be compelled to consume (or stop consuming) determined goods (merit goods). This vision suffers serious criticisms, because of an undesirable paternalism.

Although we agree with the economic presumption of market efficiency, a limited government intervention could, under certain circumstances, alleviate, but not solve, some economic problems, like unemployment and poverty. Mainstream economists still attribute to the private initiative the central role in the economy. STIGLITZ (1988) highlights that divergences are in what would be the limits of this governmental intervention.

In developing countries, regulation reached a very vast scope, including economic planning and industrial diversification, coordination of the main economic agents, resources distribution, market protection and direct action of the state, as a producer of goods and services, usually more worried with diversifying the productive capacity than with efficiency, consumers' rights and

market power. As a consequence, regulation covered a spectrum far beyond those usually present in the economic theory. While the mainstream economics is commonly based on Anglo-Saxon countries, in which the markets developed quickly, in the developing countries markets are little advanced, and sometimes almost nonexistent, therefore, with problems bigger than the most known market failures.

The role of the state and the corresponding regulation has been reviewed in the two last decades of the twentieth century. The main factors are the maturity reached by some developing markets (and corresponding societies) and the financial and fiscal crisis these interventionist states faced after being responsible for driving (or trying to drive) the economic growth for such a long period. In the political plan, this changed is marked by the election of conservative governments (Thatcher and Reagan) and, in the plan of the economic theory, by the rise of the influence of economists as Hayek, Buchanan and Friedman. Other two more or less independent causes are the globalization and technological development, in particular in the information technology area. Competition in global scale and the brutal reduction in the costs of information allowed a serious questioning of the existence or not of some otherwise traditional natural monopolies, and, as a result the reduction or disappearance of problems that justified state intervention in the economy.

4. Deregulation

After decades of government intervention based in the idea of fixing market failures, failures resultant of the action of the government started to be pointed. Are the failures detect in the government programs accidental or inherent to the own nature of the government action? Economists tend to give four main reasons for the failure of government programs in reach their goals, known as government failures. According to STIGLITZ (1988), government failures would be:

- ? Limited information, representing the difficult forecast of many of the consequences of the government actions, especially due to its complexity;
- ? Limited control over market answers, representing the low control that a government, in a democratic regime, has about the undesirable consequences of its actions, especially on the answers opposite to its initial intentions;

- ? Limited control over the bureaucracy, represented by problems when implementing public policies.
- ? Limitations imposed by the political process, when considering that the implementation of public policies conflicts with specific interests, many times represented politically. STIGLER (1989) argues, additionally, that the operation of political institutions in democratic societies will unavoidably carry to this kind of consequence, not by the “bad intentions” or representatives' inability of realize what is the public interest, but by their association with interest groups.

According to Johnson et al. (op. cit.), the criticisms government's failures do not summarize all the critics that have been done to state intervention and to regulation. There are also new theoretical developments, specially related to the reasoning for this intervention, as mentioned before. The natural monopoly, in the form as defined previously, could not present the negative effects traditionally related to it. Two famous critics are “Demsetz' Criticism” and the theory of contestable markets.

By “Demsetz' Criticism”, the absence of competition in a market would not mean total absence of competition, because this could occur for the market. According to DEMSETZ (1988) “the theory of natural monopoly is deficient for it fails to reveal the logical steps that carry it from scale economies in production to monopoly price in the market place”. Even if scale economies impose a single supplier, competition is possible at the initial stage of the offer between many candidates. As a result, competition for this right would give a price which will be lower than the natural monopoly price, due to the initial selection of the most efficient candidate. When the number of candidates is high and collusion is impossible, the price will be close to marginal cost, enabling a result similar to a competitive market. It is important to cite that, in the example used by the author the contract is periodically reviewed. Otherwise, despite the price for market had been competitive, the lack of future menace to the control of this market would allow the winner company to act as if it had market power.

The theory of contestable markets says that, under determined circumstances, a monopolistic market presents results similar to competitive markets because this monopoly can be contested. In a perfectly contestable market there are no barriers to entry or exit and, as new firms can produce the same product with the same technology and equal costs, the ‘natural monopoly’ will

be vulnerable to the new producers entrance, even though the monopolist produces efficiently and only obtain normal return about the investment.

From the understanding that role of the state in the economy should be significantly reduced, a general deregulating process begun, reaching even those countries where regulation never had a wide scope. But this indiscriminate deregulation equally resulted in problems. The expressive experience of Latin America southern countries, more exactly in Argentina, Chile and Uruguay, were a wide and fast deregulation of the economy was promoted in the second half of the 1970s, culminated in a serious crisis in the following decade. However, the sector in which the problems manifested in a more evident way was the financial system, in the USA at the beginning of the 1980s and in Japan at the end of the same decade. In the international plan, a huge sequence of crisis: the European monetary system in 1992, Mexico in 1994, Turkey in 1995, Asia in 1997, Russia in 1998, Brazil in 1999, and also Argentina, Uruguay and Brazil again.

The indiscriminate deregulation now gives room to re-regulation, that is not a way of reestablish the old regulation and much less the corresponding role of the state, but to create some sort of market-oriented regulation, in the sense of:

- ? Being selective, adopted just when it is impossible to eliminate the market dysfunction or to resort to self-regulation;
- ? Low administrative cost;
- ? Be democratic, based on negotiation and in transparency of procedures and information;
- ? Conciliate profitable activity with generalized offer of good quality goods and services.

In this new drawing the state reduces its presence to “typical” areas of performance (health, education, defense, etc.), while the private sector proceeds occupying larger spaces, introducing its logic, specially competition, in areas as the provision of infrastructure and public services.

Dealing specifically with partnerships in the provision of infrastructure, MOREIRA CARNEIRO (1994) synthesize the diagnosis:

It is interesting to note that the partnership between public and private sectors comes to attend the interests of both sides. From the governments' point of view, as it realizes the (...) exhaustion of the

financing model until then valid, arises the interest in relying on private capitals; from the private perspective, as a result of few investment alternatives in the productive sector today existing, grows the need to seek new spaces and segments for allocation of their capital.” (Pp. 29-30)

In this sense, the re-regulation of public services can be seen as the different political and institutional arrangements by which the state transfers to (or share with) the private sector the management of activities and services traditionally administrated by the public sector, but preserving planning and overseeing prerogatives, according to what is believed to be the general interest of the society. (IPEA, 1996; MOREIRA CARNEIRO, op. cit. and PRADO, 1996).

5. New models, new problems

There are theoretical problems involving two parts (state and private agents) when they establish determined contractual relation for the achievement of given goals (supply of public utilities). It is verified that this relation occurs in an environment of limited rationality, with each part having different information levels on the subject, not always similar objectives and that this relation is also subject of opportunistic behavior. It is also verified that the state supposedly acts towards what would be the “public interest” when defining goals for its action, but that this goal definition is not always given in a clear way, and could be subject to the action of groups with interests different from the public ones. There is then the possibility of, when considering the relation between different goals (interest groups, society, political and bureaucratic), that only the organized minorities can obtain what they want, in a result that, applied to the regulation of public utilities, would configure the capture of the regulatory agency.

Knowing that the problem exists, it becomes interesting to verify what kind of treatment and recommendations were done to avoid it, as so to verify what advises could be useful in the Brazilian case.

The privatization of public services was also the comeback of a sort of relation between the public and private sectors that were not so clearly present in Brazil for decades: the public service concession and the private concessionaire. This kind of relation is in itself a potential source of problems, as it is known that there are possible conflicts between these two agents, which are

studied by economists under the Economic Theory of Agency, especially under the principal-agent problem. The principal-agent term is due to the work of Steven Ross "The Economic Theory of Agency: The principal's problem, published in 1973. A principal-agent problem definition is:

“The problem that arises in many spheres of activity, when one person, the principal, hires an agent to perform tasks on his behalf but cannot ensure that the agent performs them in exactly the way the principal would like. The efforts of the agent are impossible or expensive to monitor and the incentives of the agent differ from those of the principal. Examples of the problem include the management of assets on behalf of investors; the management of companies on behalf of shareholders by executives; and the running of public services by private firms under regulation by government authorities. The principal-agent relationships are characterized by asymmetric information.” (Bannock et al., 1992, 340).

In STIGLITZ' definition (1987), the literature concerning about the principal-agent problem deals on how an individual, the principal, can draw a compensations system (a contract) that motivates other individual, the agent, to act according to the interests of this principal. The principal-agent problem arises when there is imperfect information about what the agent did or should do. There are situations in which agent's actions cannot be observed or perfectly inferred from observable variables. Moreover, many times the principal hopes that the agent acts based in information just available to him, agent. Due to the information asymmetry, the principal does not know if the decisions taken by the agent would be the ones that he, principal, would have been taken at the same circumstances.

As a consequence, even though the principal can observe these taken actions, he cannot know if they are the appropriated ones. In its standard formulation, one seeks a contract (compensation outline) that maximizes the principal's expected utility given (a) that the agent acts is such a way to maximize his own expected utility, given the compensation outline, and (b) that the agent wishes to accept this contract. The main difference between this approach and the traditional

economic theory is that, in the traditional theory, it is made the supposition that the actions that the principal hopes the agent will execute are perfectly well-known, as well as can be oversaw perfectly and without costs.

Continuing his reasoning, STIGLITZ (op. Cit.) defines the main reasons for the appearance of this kind of interdependence. Once the economic relations cannot have the symmetry expected in the traditional neoclassic analysis, the existence of the principal-agent problem can arise:

- ? In the cases in which the intertemporal nature of the economic relation enables the agent to take decisions after the establishment of a contract and that influence the expected result established with the principal. This problem, common to insurance and credit contracts, is also known as problem of moral hazard. It would be a case of post-contractual opportunism.
- ? In the cases in which the principal tries to extract the maximum income possible from the agent. This problem is particularly well studied in the concession of public services, when the government does not know which minimum compensation to the agent is necessary for services maintenance. In the case of the public services, there is also the possibility of the government being interested not only in the incomes that it receives, but also in the attitudes that the concessionaire takes.

In other way, the problem between principal and agent arises when one of the involved sides (principal) tries to establish an incentive structure that address the actions of another (agent) for the achievement of their (principal) own objectives. From this action result two kinds of potential conflicts caused, on one side, by the possible conflict of objectives among parts and, on another, by the different available information for each part.

One can verifies that the matter brings still bigger difficulties when applied to the concession of public services and regulation, as we have four interested sides: the citizens, who expect some services to be provided, the government, acting as an agent in behalf of the public and the concessionaires and the regulatory agencies, both acting as agents of the government. Each one of these can have different objectives.

An important aspect for the understanding of this problem and the proposition of alternative solutions is how contracts are established, question that is dealt, among others, by WILLIAMSON (1985). This author, studying the contracts purpose, admits two basic behavioral characteristics: limited rationality and opportunistic behavior. In this sense, the relation between

principal and the agent would be subject to contracts established under this limited rationality. Like ideal contracts would depend on full rationality, this limitation would allow at most the second best option, which, moreover, also would be subject to agents' opportunistic behavior.

This is important because once moving from a situation where the economic activity was executed by a state-owned company and it is transferred to the private sector under expected conditions and subject to regulatory supervision, there is a lot of room for the establishment of special interests that can make almost impossible for any institution under an imperfect contract to reach its objectives.

According to the work of Mancur Olson, *The Logic of Collective Action* (OLSON, 1965), the formation and behavior of interest groups depend on the objectives of the group and on the nature of the good, and not on characteristics of the group. In market situations, goods desired by certain group (collective goods) are limited in its offer. In situations other than the market, goods like public goods bring benefits that are expanded according to the size of the group. For OLSON, the first kind of goods is called exclusive collective goods; the second kind is called inclusive collective goods.

- ? Exclusive collective goods demand the participation of all the members of the group to be obtained (such as an agreement to raise prices) because, when there is a dissident, he will be able to retain for himself all the benefits of the organization of the others. This characteristic stimulates dissidences, because gives great power of bargain to the not-participant. As a result, the maintenance of the group depends on an arrangement similar to oligopolistic interaction with mutual dependence.
- ? Inclusive collective goods, by its turn, do not carry the groups to wish the exclusion of none of their members; neither have they stimulated dissidences, as they can be obtained without unanimities. This generates complications, because there will be situations in which there will not be incentives so that the individuals act around their common interest, and, as a consequence they will not obtain the good.

When studying this matter, OLSON (op. cit.) proceeds working with the size of the groups, evaluating in which way this factor, plus the incentives that each one has with the association, contribute for the obtainment or not of inclusive collective goods. According to its size, groups

can be of only one individual up to a great number of people. Only individual is not problem, because his action does not depend on the interaction and coordination with third party. Larger size groups have other characteristics. OLSON (op. cit.) will treat, in increasing scale of greatness, of privileged groups, intermediary groups and latent groups.

- ? Privileged groups are those in which the individual incentive for the provision of the good is enough so that only one individual could assume all the costs, what, in thesis, would allow the good be obtained without the need to coordination (but there is the possibility when each one thinks the other one will pay the cost, without anybody doing it).
- ? Intermediary groups are those in which the individual incentive is not enough so that only one member assume with the costs. Thus, the only way the good is obtained is through the organization and/or coordination.
- ? Latent groups are those in which there are no incentives for the collective action. The larger the group, the smaller the fraction of the total benefit each member receives, the smaller its oligopolistic interaction is and the larger their organizational costs are. This complicates the actions guided for the group, leading to a sub-optimal (when there is) obtainment of the collective good. According to the author, is just through selective and individualized incentives, greater than the individual costs for the obtainment of the good, that the benefit will be obtained.

There are, however, big organized groups. When analyzing the reason why this occurs, OLSON concludes that these organizations arise for having capacity of mobilizing a latent group through selective incentives derived of other activity than lobbying for collective goods. It like puts the author:

“The large and powerful economic lobbies are in fact the by-products of organizations that obtain their strength and support because they perform some functions in addition to lobbying for collective goods.” (P.132)

Examples of the incentives used by these organizations are: authority and capacity to be coercive (as, for example, class associations that regulate profession) or which are source of several incentives to the individuals in latent groups (as, for example, sectorial statistics, customers

mailings, credit insurance etc.). What matters is the need to associate a collective good to a not-collective one, conditioning one to the other (“tied sale”, says OLSON, op. cit.). Individuals will only incur in organization if they receive selective incentives to do so (individualized benefits) or if it is mandatory. It is a comparison between opportunity costs versus individual benefits, with the possible problem of the free rider. The logic of this collective action does not wait the appearance of big groups, but of silent majorities and small acting groups. As a consequence, the political decisions would be motivated by these active minorities, and not by the silent majorities (that have no stimulus by the diffuse benefits).

6. Interest groups and regulatory agencies

Under which circumstances the regulation is politically possible? What kind of regulation standard emerges from given political context and which are the forces that are going to influence the way how given agency operates?

According to WILSON (1989a, 1989b), the choice is between two imperfections: from the market and from the government. In this sense, it is important to define under what terms regulation is an efficient and fair way for the consecution of public goals. Evaluating only the political circumstances, two distinct theories on the political cause of regulation are presented: public interest and self-interest:

- ? For the theory of the public interest, regulation is a result of a strong social movement (against tobacco, for ecology etc.) or of a dramatic crisis (as with thalidomide victims, in 1961), that mobilizes the Legislative for the need of laws avoiding certain firm or industry of maintaining certain behavior.
- ? For the self-interest theory, regulation is the result of successful use of political influence for an industry in behalf of legal protection for itself or legal restrictions against their competitors.

WILSON (1989a) stands that regulation has a variety of political causes being necessary, to understand it, to establish the circumstances in which one or another cause operates. The costs and benefits realized by the individuals as a result of the regulation are considered important when explaining this problem. Other important characteristics would be: individuals are guided most by threats (represented by an increase in the costs or fall in the benefits) that for opportunities (a possible reduction of costs or increase in benefits) and that small interest groups

organize more easily than big ones. Developing his reasoning, Wilson presents initially three forms of factor concentration, each one carrying the affected by the regulation to a specific organizational form and to a specific kind of politics.

The first kind occurs when there are concentrated benefits (per capita) and diffuse costs (per capita also). When this occurs, soon we will see the formation of a group interested in institutionalize the benefit, and this proposed, except exceptions, will not suffer big resistances. As a result, the regulatory policy developed would have some of the following characteristics:

- ? Elimination or reduction of the price competition in the industry;
- ? Restrictions on entry of new firms in the industry;
- ? Strong beneficiary's influence on the regulatory agency;
- ? Either the agency or the industry will seek a position of little visibility, in a way to make more difficult for the harmed ones to react;
- ? If the regulation becomes controversial, it will be defended by an argumentation based on consumers' safety warranty, protection against frauds, as well as the promotion of some other benefits resulting from regulation.

The second kind is what occurs when benefits and costs are concentrated. In this case, at least two groups have incentives to organize, one against and another favorable to the regulation. The characteristics of this situation are:

- ? Adoption of an agreement, defining rights and obligations of each part;
- ? None of the organized sectors manages to dominate permanently the administrative structure responsible for the agreement implementation and maintenance;
- ? Both sides will have continuous efforts to renegotiate or to amend the agreement;
- ? The visibility of this position will be relatively high as, by the intrinsic existing conflict, each part will constantly seek for new allies, as well as for legal support.

The third kind occurs when there are diffuse benefits and concentrated costs. In this case, only the group against the regulation has an incentive to organize. If such policy occurs, this is due to some strong popular commotion, being such situations interpreted by the political class (especially the ones at the Legislative power) as an opportunity for visibility. The characteristics of the measures taken under such terms would be:

- ? Focus in a great “evil” personified (industry or sector), factor necessary to the dramatization that guarantees the publicity and political momentum, in the competition for attention inside and around the Congress;
- ? To be a “strong measure”, taken without time to conflicts accommodation and without incentives so that an alternative, politically more acceptable formula could be developed (what also would reinforce the moral appeal, in opposition of “commitment solutions”);
- ? Occurrence of few substantive bargains;
- ? The solution comes not only of the problem analysis, but also of the political process.

Wilson (1989b) comments that government agencies with high degree of discretion end having their objectives defined by the pressures of organized external interests, especially in an environment as the one in the United States, where the political authority is excessively decentralized, leaving the agency unprotected against lateral pressures. Concisely, the agency goals would not be defined by situations, rules, experiences, guidelines or ideology, but by interests. There would be, however, other explanations. According to this point of view, what would define the agency tasks would be: the law, its formative experience and the professional rules of their members, and not private interest.

Which would be so, the influence of external agents in the goals of a given agency? According to Wilson (1989b), this influence depends, in a first moment, of the way these interests are organized in the political environment. There are four possible environments for a government agency:

1. A dominant interest group favoring its goals;
2. A dominant interest group hostile to its goals;
3. Two or more rival interest groups in conflict over its goals ; or
4. No important interest group.

In case 1, most of the benefits from the agency’s actions are concentrated, but most of the costs are diffuse. The great benefit per capita compared to a low individual costs is an incentive to the beneficiary to organize, while the prejudiced do not. The strong support of this group to the

agency can mould its politics, which are characterized as client politics, as, for example, the agricultural subsidies.

In case 2: most of the costs are concentrated, but most benefits are diffuse. The great cost per capita compared with the low individual benefit is an incentive to the affected side to organize, but not to the beneficiaries. The strong antagonism of the former group to the agency will only be counterbalanced while there is other group that, due to side interests, give support to its action (as, for example, a politician exploring the cause). When the support weakens, the agency will be abandoned in an environment where information and political power are in the hands of their opponents. If they survive, these will be characterized as entrepreneurial politics.

In case 3, both costs and benefits per capita are concentrated. Both involved groups have incentives to organize and do pressure on the agency, being the agency held due to the joint action of the two groups. As a result they do what Wilson calls interest-group politics.

In case 4, both costs and benefits per capita are diffuse. None of the two involved groups has incentives to organize and do some pressure on the agency, being the agency supported by popular action or by groups with lateral interests. As a result they do what Wilson calls majoritarian politics.

7. Regulatory Capture

Once we know that interest groups have incentives to organize and, as a result, influence decisions made by regulatory agencies in a way that can lead to a kind of politics favorable to them (and usually harmful to the society), it is important to figure out how this specific situation can be avoided.

“Regulatory capture”² is a phenomenon in which a government regulatory agency which is supposed to be acting in the public interest becomes dominated by the vested interests of the existing incumbents in the industry that it oversees. In public choice theory, regulatory capture arises naturally from the fact that vested interests have a concentrated stake in the outcomes of political decisions, thus ensuring that they will find means - direct or indirect - to capture decision makers. The concept is central in a branch of public choice that is often referred to as the "economics of regulation", which is critical of earlier conceptualizations of regulatory intervention by governments as being motivated to protect public goods. Two often cited articles

² http://en.wikipedia.org/wiki/Regulatory_capture

are Laffont & Tirole (1991) and Levine & Forrence (1990). The theory of regulatory capture is associated with Nobel laureate economist George Stigler, one of its main developers.

In the work of George Stigler, *The Theory of Economic Regulation* (STIGLER, 1989), this author develops as central thesis that “...as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit.” When proposing this thesis, the author contests the vision that regulation is instituted for the public benefit. The real problem regarding regulation would be to discover when and why an industry (or interest group) is able to use the state for its purposes. The agency, in this analysis, would develop regulations and operate primarily for industry benefit. As a result, the coercive powers of the state can be used to funnel resources to the overseeing industry as subsidies, control on new rivals, control on the production of substitute goods, stimulus on the production of complementary goods and even price fixation. Thus, the regulation would not be feared, but in fact it would be persecuted by the industry.

For Wilson (1989b), agencies organized in client environment have high risk of being captured, especially by the fact that the interested group usually have more and better information than the agency itself, as well as have interest in maintaining frequent contact with it. Agencies with entrepreneurial goals are subject to the continuity of the support from a favorable group. Agencies of this kind are subject to capture, but this is not inevitable, depending on the continuity of the interest that motivated its creation. Their opponents, with frequency, tend to create competitive and more competent teams, as a way to hire the agency’s best technicians.

DAL BÓ (2006) shows that “asymmetric information is the source of regulatory discretion, making capture possible.” The regulator participates of a three-tier hierarchy comprising a political principal (the government), a regulator, and an agent (the firm). The firm has superior information about its production costs and may tempt the regulator not to disclose this information. “The scope for such capture of the regulator by the firm depends on the amount of information that the regulator may obtain, and on how easy the environment makes it to bribe regulators.”

8. The Importance of Human Resources in Effective Regulation

SCHNEIDER (1995) evaluating the matter of autonomous decision among bureaucrats states that bureaucrats are primarily interested in their careers. As a consequence, the bureaucrat's position about given matter would depend on his current situation and of his future perspectives. For this

author, five variables should be considered to evaluate the decision autonomy and power of a bureaucracy: social base, recruitment (formation and “educational funnel”), contractual relation with the state, career progression and career perspectives after outside government.

The author points out that, in all studied cases, top bureaucrats have high social origin and, in its majority, academic level. In France, Japan and Mexico recruitment is done in a small number of universities (ENA, Tokyo, UNAM) what, in his opinion, makes more possible the existence of a merit elite, cohesive and homogeneous. The same does not occur in Brazil and in the USA. For the author, where there are merit elites, there is the competence presumption, which enables a larger authority and decision power.

Regarding bureaucrats’ ties to the state, the author says that “the less the civil servants circulate among public and private sectors, and the more they circulate inside the state, more opportunities they will have to develop clearly centralizer tendencies.” The occupational isolation increases the chances for the formation of a distinct social group (state elite), with preferences different from society. In the same way, when the labor turnover occurs inside the government, this would have a double effect on the central control and in the bureaucratic autonomy: it would prevent the lasting and intimate contacts among civil servants and local interests, assuring, above all, that the civil servants would remain loyal to the central authority that controls their careers.

“Mobility in Brazil and in Mexico is larger [that in Japan or in the USA]: the civil servants change from an branch or from a ministry to another every four or five years.(...) In Brazil (...) some civil servants remain in an unique ministry, others join *camarilla*-type informal groups and others just circulate. These circulation standards determine then the incentives and main loyalties for ambitious bureaucrats. These loyalties, then, should affect the centralized character of the preferences, the bases for conflicts between departments, and the probability of strong coalitions between companies and bureaucrats, sometimes called ‘iron triangles’, or, in Brazil, ‘bureaucratic rings’.” (P.22)

As for career progression, the power of hiring and firing has direct and decisive impact on the careers and incentives. When the promotion is for merit, the social actors lost the “more powerful

lever” to influence the bureaucratic behavior that is the career promotion or interruption. And finally, discharge/retirement standards can be the more powerful component in the relation determination between bureaucrats and businessmen. The author uses the Japanese term *amakudari*. In Japan, *amakudari* is the practice of retiring from high government office and joining a large corporation. The term literally means "descent from heaven", and represents the movement of the top bureaucrats to the private sector at the end of their careers. This factor would tend to change bureaucrats' behavior in their last years of service, time in which they probably would have more power.³ Three would be the possible relations between businessmen and the bureaucracy, through *amakudari*: fusion, mediation and differentiation.

Fusion would be the tendency in Japan and France, with great number of bureaucrats retiring themselves and then occupying high positions in the industry and in politics (fusion of the industrial, political and bureaucratic elite). This situation could weaken state autonomy, facilitating its capture. If this does not occur is largely because these elites were educated in the ethics, with an auto-imposed responsibility of conducting the society towards national interest.

Mediation occurs when there is communication between bureaucracy and businessmen, but this is not in such great quantity that facilitates or complicates the bureaucracy autonomy. The differentiation occurs when the private sector does not have how to use bureaucrats' knowledge. In this sense, it facilitates the autonomy, because it makes *amakudari* more difficult. According to author, careers in Brazil (as well as in Mexico and in the USA) would have mainly this characteristic.

DAL BÓ (op. cit), reviewing capture models, explains that the provision of information is also a form of exerting influence. "...regulators may come to view the world the way firms do, not because they have been captured through incentives, but because they have been convinced". These incentives can be positive, as bribes or future industry employment ("revolving doors"), but also can be negative. The author calls it the "provision of trouble", in the form of actions that trigger a reputational damage for the regulator. According to him, these problems can play a larger role when regulatory employment is weak in terms of stability or time horizons. Alternatives to make capture more difficult are related to institutional building, as bureaucratic procedures that

³ In July of 2002, the Japanese Prime Minister Junichiro Koizumi ordered that the practice of *amakudari* be completely stopped in Japan, because it is widely regarded as a source of corruption between business and politics.

allow various stakeholders to share information, the creation of legislative committees to monitor the regulator and also the creation of consumer advocate groups.

For STIGLER (1989), the bureaucrats have a privileged position in relation to the regulated sector they oversee. The idea of public interest and/or disinterested bureaucrats is discarded, there being collusion among bureaucrats, congress committees and industries, through which the industry receives favorable regulation and finances congress members' campaigns, that then increase bureaucrats' budgetary endowments. The solution for the problem would be a change in the way agencies are politically supported, making their work be rewarded based on other factors than those related to their services to the regulated industries. A larger deregulation is also a possible solution.

For Wilson (1989b), the beliefs of the civil servants are important. If they do not have future interests in the regulated sector neither they want to be seen as incompetent due to their submission to interest groups, these factors can be important and difficult the capture of an agency.

For SCHNEIDER (op. cit.) bureaucracies resultant from a merit elite, with little circulation among public and private sectors but with circulation inside the government, with career progression based on merit and differentiated retirement rules (reducing the chance of amakudari), would have better conditions to formulate policies in a more independent way.

9. Brazilian Electricity Regulatory Agency – ANEEL

The Brazilian Electricity Regulatory Agency – ANEEL, created by Law 9427 of December 26, 1996, is a semi-autonomous governmental organization established under a special regime, linked to the Ministry of Mines and Energy – MME. Its powers and responsibilities are: to regulate and supervise the generation, transmission, distribution and commercialization of electric power, addressing fairly the complaints from agents and consumers, for the benefit of society; to mediate conflicting interests among agents of the electrical sector and between these agents and consumers; to grant, permit and authorize electric-power facilities and services; to warrant fair electricity rates; to attend to the quality of services; to enforce investment by the regulated entities; to encourage competition among the operators and to ensure universal access to services. ANEEL emerged from the restructuring of the Brazilian electrical sector. The State was to gradually relinquish the means of production in the electrical sector and was to become the

regulator and overseer of the quality of services delivered to the population. ANEEL took on the role of regulating and inspecting the new market, which was established in the Country based on the introduction of free competition in the segments of generation and commercialization of electric power.

Although the regulatory capture had been a known issue matter argued in the “Master Plan of State Reform”, the Executive's proposed bill, creating the ANEEL lacked of mechanisms to avoid the problem as, for example:

- ? The need of any proposed director to be approved by the Senate;
- ? The directors' quarantine, with to future work for any of the regulated entities;
- ? Restrictions on requesting employees from regulated companies;
- ? Managerial contracts as an instrument to evaluate ANEEL's performance.

The project did not respect, as well, the ministerial suggestion, formalized in the Mines and Energy Minister Exhibition of Reasons, of the creation of a special career to inspect the public service of electric power. The project foresaw that the inspection would be given by means of covenants with state entities (which may also be interested parts in the inspection) or through technicians and specialized particular companies. On the other hand, the project denoted the preoccupation in preserve the existing bureaucratic structure, when it foresaw that ANEEL's regimental structure would absorb the National Department for Water and Electric Energy - DNAEE, including all the appointed positions and gratified functions and that the first composition of ANEEL would be done with employees from the Ministry of Mines and Energy – MME.

The bill was approved after the correction of some these distortions by the Chamber of deputies:

- ? Introduction of quarantine for former-directors and restrictions relative to the previous industry employment for the occupants of directive positions. There are restrictions even to the use of employees requested from other bodies;
- ? Senate approval for appointed directors;
- ? Performance evaluation should be made through managerial contracts. The unjustified noncompliance to the established goals may motivate the discharge of its leaders;
- ? The absorption of DNAEE's structure was removed, and career employees will be preferred when filling appointed positions ;

- ? The not-coincidence of the directors' terms.

The decentralization of ANEEL's activities, admitted in the Agency's founding Law, has the following objectives:

- ? To draw the actions of regulation, surveillance and mediation closer to consumers and to the regulated entities;
- ? To expedite the processes of regulation, surveillance and mediation;
- ? To adapt the actions of regulation, surveillance and mediation to local conditions and circumstances;
- ? To solve any problem at its source.

The decentralization process in ANEEL consists in the devolution, by means of Cooperation Agreements, of some of its powers and responsibilities to regional regulatory agencies formed in the states of the Brazilian Federation. The main activities that have been devolved to the state agencies are related to surveillance and to the ombudsman tasks, although some support may also be offered by them to ANEEL in the regulation process – which is exclusively under the Federal Agency's competence. The performance of the decentralized activities is financially supported by ANEEL through the transfer of financial resources to the state agencies. These resources come from the Surveillance Fee paid by regulated entities to ANEEL.

The public hearings allow the ANEEL to share the responsibility with society for restructuring the electric-power market. ANEEL counts on this mechanism to receive contributions on technical and regulatory issues under study. The hearing process has two stages; first the participants send suggestions in writing, then ANEEL holds open debates on the subject. Until 1999, public consultations were held in which the Agency only received the texts from the collaborators. Hearings may take place under the form of an exchange of documents whereby those interested send their written suggestions on the theme in question to the agency, or they may involve the physical presence of the parties in which case the hearing is scheduled beforehand at a determined time and place. In this way there is a considerable mobilization of society which participates in an active way in defense of its interests.

The ANEEL has also intensified its oversight & investigations activities, which are specially concentrated in the areas of economy and finances, generation and electric-power services, so as to encompass all concessionaires, permissionaires and authorized companies in operation in the

country. While the ultimate purpose of ANEEL’s oversight & investigations activities is to ensure the provision of good-quality services at affordable rates, the overseers’ primary concern is to provide instruction and guidance to market entities regarding the fulfilment of their contractual and regulatory obligations. The Agency’s oversight & investigations activities are performed under ANEEL’s Resolution 318 of October 6, 1998. At the end of a round of actions (scheduled or unscheduled) concerning any specific company, the overseers summarize their findings in a report where certain measures are presented as recommendations (suggestions) or orders, in more serious situations. Any indication of a violation of rules and laws governing the electric-power market determines the launching by ANEEL of investigatory procedures that may result in the imposition of penalties ranging from warnings and fines to the revocation of the company’s concession.

10. Conclusions

The decision of transferring public utilities to the private sector under surveillance of a regulatory agency was a decision favorable to a more market-oriented economy. However, as the economic theory shows, this decision brings new problems, specially the capture of the regulator by interest groups and the use of its regulatory powers in favor of these groups, what is not only socially unfair, but also can be very inefficient in an economic perspective.

The literature regarding this issue gives us a long list of examples and recommendations focused on reducing the possibility of capture. It can be seen, by the table below, that ANEEL has many of these recommendations in its founding law.

Table 1 – Factors for agency autonomy

	ANEEL
Channels to hear citizens’ complains	Yes.
Clear definition of users’ rights	Yes
Publicity of decisions	Public and open meetings, consumers’ advices, consultations and public hearings.
Political and institutional insertion	Directors appointed by the President and approved by the Senate. Cooperation Agreements with state commissions of public services. The Agency provides technical support in sentences and decisions by the Economic Defense Administrative Council

	(Cade), Secretariat of Economic Law (SDE) – of the Ministry of Justice and the Secretariat of Economic Monitoring (Seae), of the Ministry of Finance.
Own revenue	Surveillance Fee paid over electric power services.
Juridical autonomy	Yes
Fixed terms as director	Yes
Not coincident terms for directors	Yes
Restrictions to the leaders qualification	Yes
Collegiate decisions	Yes
Permanent body of civil servants	Yes
Merit elite	In terms
Career progression based on merit	Yes, but not only
Differentiated disconnection standards	Quarantine for directors

The point that deserves our special attention is the way its body of employees is composed and maintained. The law creating it is relatively new (it was approved in 2004), and the agency was worked from its creation until that date with a temporary body of employees. Regardless the quality of the services provided by them, can be inferred by the literature reviewed that the structure of incentives and ways of maintenance and improvement of this permanent human capacity is of central importance for the autonomy of any regulatory board.

In such sense, the independence of ANEEL is still strongly related to the way it will deal with its human resources and its efforts towards the constitution of a real merit-based body of employees.

11. References

- ABRANCHES, S. *Reforma regulatória e reforma do Estado: conceitos, experiências e recomendações para o Brasil*. Texto para discussão no Conselho da Reforma do Estado. Brasília : [s.n., 1996]. Mimeografado.
- ABRUCIO, Fernando L. *O impacto do modelo gerencial na administração pública: um breve estudo sobre a experiência internacional recente*. Brasília : ENAP, 1996. Mimeografado.
- BARZELAY, Michael. *Breaking through bureaucracy: a new vision for managing in government*. Berkeley : University of California Press, 1992.
- BANNOCK, Graham, BAXTER, R. E., DAVIS, Evans. *Dictionary of economics*. New York : J. Wiley & Sons, 1998.
- BOBBIO, Norberto, MATTEUCCI, Nicola, PAQUINO, Gianfranco. *Dicionário de política*. 7. ed. Brasília : Editora Universidade de Brasília, 1995.
- BRASIL. Constituição. 1988. *Constituição da República Federativa do Brasil*. Brasília : Gráfica do Senado, 1988.
- BRASIL. Decreto no 2.338 de 07 de outubro de 1997. Aprova o Regulamento da Agência Nacional de Telecomunicações e dá outras providências. Legislação “on-line”, disponível na Internet, no site: <http://bdtextual.senado.gov.br/bdcoi/legbra/legbra.htm>.
- BRASIL. Lei 8.987/95. Dispõe sobre o regime de concessão e permissão da prestação de serviços públicos de previsto no art. 175 da Constituição Federal e dá outras providências. Legislação “on-line”, disponível na Internet, no site: <http://bdtextual.senado.gov.br/bdcoi/legbra/legbra.htm>.
- BRASIL. Lei 9.074/95. Estabelece normas para outorga e prorrogações das concessões e permissões de serviços públicos e dá outras providências. Legislação “on-line”, disponível na Internet, no site: <http://bdtextual.senado.gov.br/bdcoi/legbra/legbra.htm>.
- BRASIL. Lei no 9.427, de 26 de dezembro de 1996. Institui a Agência Nacional de Energia Elétrica - ANEEL, disciplina o regime das concessões de serviços públicos de energia elétrica e dá outras providências. Legislação “on-line”, disponível na Internet, no site: <http://bdtextual.senado.gov.br/bdcoi/legbra/legbra.htm>.
- BRASIL. Lei Nº 9.478, de 6 de agosto de 1997. Dispõe sobre a política energética nacional, as atividades relativas ao monopólio do petróleo, institui o Conselho Nacional de Política Energética e a Agência Nacional do Petróleo e dá outras providências. Legislação “on-line”, disponível na Internet, no site: <http://bdtextual.senado.gov.br/bdcoi/legbra/legbra.htm>.
- BRASIL. Mensagem n. 234/96 da Presidência da República. Encaminha à Câmara dos Deputados Projeto de Lei que cria a Agência Nacional de Energia Elétrica, cria o Conselho do Serviço Público de Energia Elétrica e dá outras providências, acompanhado de Exposição de Motivos do Ministro de Minas e Energia. Legislação “on-line”, disponível na Internet, no site: <http://bdtextual.senado.gov.br/bdcoi/legbra/legbra.htm>.
- BRASIL. Presidência da República. *Plano diretor da reforma do aparelho de Estado*. Brasília, 1995.

- BREYER, Stephen.. Regulation and deregulation in the United States: airlines, telecommunications and antitrust. In: MAJONE, Giacomo (Coord.) *Deregulation or re-regulation?: regulatory reform in Europe and United States*. Londres : Pinter Publishers, 1990.
- CARNEIRO, J. G. PIQUET. *O novo modelo de órgão regulador*. Texto para discussão no Conselho da Reforma do Estado. Brasília, 1996. Mimeografado.
- CHIAVENATO, Idalberto. *Introdução à teoria geral da administração*. 4.ed. São Paulo: Makron Books, 1993.
- DAL BÓ, Ernesto. *Regulatory Capture: A Review*, Oxford Review of Economic Policy 22, August 2006. <http://faculty.haas.berkeley.edu/dalbo/>
- DEMSETZ, H. Why regulate utilities. In: STIGLER, G.L. (Ed.) *Chicago studies in political economy*. Chicago : The University of Chicago Press, 1988.
- FARINA, Elizabeth M. M. Q. et al. A reestruturação dos setores de infra-estrutura e a definição de marcos regulatórios: princípios gerais, características e problemas. In: REZENDE, Fernando, DE PAULA, Tomás Bruginski (Coord.) *Infra-estrutura: perspectivas de reorganização, regulação*. Brasília : IPEA, 1997.
- GORINI, Ana Paula Fontenelle. Regulamentações do setor de telecomunicações inglês e seus impactos sobre o “welfare”. *Revista do BNDES*, Rio de Janeiro, v. 3, n. 5, p. 127-154, jun. 1996.
- GRAU, N. C. A rearticulação das relações Estado-sociedade: em busca de novos significados. *Revista do Serviço Público*, Brasília, v. 120, n. 1, p. 113-140, jan-abr. 1996.
- GUNNING, Patrick. *Understanding democracy: an introduction to public choice*. Livro “online”, disponível na Internet, no site: <http://www.fortunecity.com/meltingpot/barclay/212/votehtm/cont.htm>, 26 abr. 1999.
- INSTITUTO DE PESQUISA ECONÔMICA APLICADA. *Perspectiva de reestruturação financeira e institucional dos setores de infra-estrutura*: projeto de pesquisa. Brasília, 1996.
- JOHNSON, Bruce B. et al. *Serviços públicos no Brasil, mudanças e perspectiva: concessão, regulamentação, privatização e melhoria da gestão pública*. São Paulo : E. Blücher, 1996.
- JORDAN, W. Producer protection, prior market structure and the effects of government regulation. *Journal of law and economics*, Washington, v. 15, n. 1, 1972.
- LAMOUNIER, Bolívar. A segunda revolução brasileira. *Gazeta Mercantil*, São Paulo, 25 set. 1996.
- MARQUES, Hamilton N. O consumidor em face da privatização dos serviços públicos essenciais. In: INSTITUTO DE PESQUISA ECONÔMICA APLICADA. *A economia brasileira em perspectiva, 1996*. Rio de Janeiro : IPEA, v. 1, 1996.
- MARTINS, Humberto F. Burocracia e a revolução gerencial: a persistência da dicotomia entre política e administração. *Revista do Serviço Público*, Brasília, v. 48, n. 1, jan-abr. 1997.
- MELO, M. A. Governance e reforma do Estado: o paradigma agente x principal. *Revista do Serviço Público*, Brasília, v. 120, n. 1, p. 67-82, jan-abr. 1996.

- MOREIRA, Terezinha. O processo de privatização mundial: tendências recentes e perspectivas para o Brasil. *Revista do BNDES*, Rio de Janeiro, v. 1, n. 1, p. 97-112, jun. 1994.
- MOREIRA, T., CARNEIRO, M. F. C. A parceria público-privada na infra-estrutura econômica. *Revista do BNDES*, Rio de Janeiro, v. 1, n. 2, p. 27-46, dez. 1994.
- NASCIMENTO, Cynthia. A política de concorrência no Brasil e o novo paradigma regulatório. *Revista do BNDES*, Rio de Janeiro, v. 3, n. 5, p. 155-170, jun. 1996.
- OLSON, Mancur. *The logic of collective action: public goods and the theory of groups*. Massachusetts : Harvard University Press, 1965.
- PELTZMAN, S. *The economic theory after a decade of deregulation: Brookings papers on economic activity—microeconomics*. Washington : Brookings Institution, 1989 .
- PENNAFORT, Ciro Guarani. *Desregulamentação e novas regulamentações: subsídios para a reforma do Estado*. Rio de Janeiro : IBAM, 1994. v.3
- PINHEIRO, Armando C. O setor privado na infra-estrutura brasileira. *Revista do BNDES*, Rio de Janeiro, v. 3, n. 5, p. 87-104, jun. 1996.
- PRADO, M. Concessão pública: um empreendimento público comercial. *Revista do BNDES*, Rio de Janeiro, v. 3, n. 5, p. 105-126, jun. 1996.
- PRZEWORSKY, Adam. *On the design of the State: a principal-agent perspective*. Trabalho distribuído no Seminário Internacional Reforma do Estado na América Latina e no Caribe, 1996, Brasília.
- SÁ, Eduardo K. de. A privatização do setor elétrico na Inglaterra e reflexões para o caso brasileiro. *Revista do BNDES*, Rio de Janeiro, v. 2, n. 3, p. 127-150, jun. 1995.
- SCHNEIDER, Ben Ross. A conexão da carreira: uma análise comparativa de preferências e insulamento burocrático. *Revista do Serviço Público*, Brasília, v. 119, n. 1, p. 9-43, jan-abr. 1995.
- SILVA, Eduardo da, SILVA, Ilton. *Concessão de serviços públicos no Brasil: considerações e proposições de mudanças ao projeto substitutivo n. 292/91 da Câmara dos Deputados*. Convênio IBAM/IPEA/ENAP. Brasília, 1994.
- SOUSA, R. A., MOREIRA, T. Reflexões sobre a concessão dos serviços públicos. *Revista do BNDES*, Rio de Janeiro, v. 4, n. 4, p. 39-54, dez. 1995.
- SOUZA E SILVA, Carlos Eduardo. Marcos iniciais da (re)regulação da infra-estrutura no Brasil. In: REZENDE, Fernando, DE PAULA, Tomás Bruginski (Coord.) *Infra-estrutura: perspectivas de reorganização, regulação*. Brasília : IPEA, 1997.
- STIGLER, George. (Ed.). *Chicago studies in political economy*. Chicago : The University of Chicago Press, 1988.
- _____. The theory of economic regulation. In: FERGUSON, Thomas, ROGERS, Joel (Ed.). *The political economy: readings in the politics and economics of american public policy*. local : M.E. Sharpe, 1989.
- STIGLITZ, Joseph E. Principal and agent. In: EATWELL, John, MILGATE, Murray; NEWMAN, Peter. *The New Palgrave: a dictionary of economics*. London : The MacMillan Press, 1987.

- STIGLITZ, Joseph E. *Economics of the public sector*. 2nd.ed. local : W.W. Norton, 1988.
- TEIXEIRA, Hélio J., SANTANA, Solange M.. *Remodelando a gestão pública*. São Paulo : E. Blücher, 1994.
- WILLIAMSON, Oliver E. *The economic institutions of capitalism: firms, markets, relational contracting*. London: Free Press, 1985.
- WILSON, James Q. The politics of regulation. In: FERGUSON, Thomas, ROGERS, Joel (Ed.). *The political economy: readings in the politics and economics of american public policy*. local : M.E. Sharpe, 1989a
- _____. *Bureaucracy: what government agencies do and why they do it*. New York : Basic Books, 1989b

1.	Introduction.....	1
2.	The Brazilian State in the 1990's.....	1
3.	State intervention.....	4
4.	Deregulation	8
5.	New models, new problems.....	11
6.	Interest groups and regulatory agencies	16
7.	Regulatory Capture	19
8.	The Importance of Human Resources in Effective Regulation.....	20
9.	Brazilian Electricity Regulatory Agency – ANEEL.....	23
10.	Conclusions	26
11.	References.....	28