

Anti-Corruption Strategies as Safeguard for Public Service Sector Reforms

Frédéric Boehm*

* Anti Corruption Training & Consulting (ACTC), and Research Center in Political Economy (CIEP), Universidad Externado de Colombia

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ABSTRACT: One of the main objectives of reforms in public service sectors, comprising deregulation, restructuring and private-sector participations, is the introduction of competitive pressures. In turn, effective regulation is one of the key elements for reform's success. However, regulation is prone to capture by narrow interests. This paper provides an overview of possible anti-corruption strategies which, in the end, have the objective to safeguard the objective of reforms. The paper starts discussing organizational aspects: decentralization, horizontal organization, and the issue of regulatory autonomy. Then three key factors are presented: incentives, institutions and information. Traditional incentive theory within a principal-agent model leads to contemplating control, rewards and sanctions. A new institutional approach taking into account the characteristics of corrupt deals leads to policies aiming at augmenting the transaction costs of corruption and fostering the opportunism between corrupt partners. Finally, measures are discussed seeking to tackle the problem of information asymmetries between the different actors, which is the root for capture and corrupt opportunities.

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Contact Address:

fredericboehm@hotmail.fr

1 Corruption: A Threat to Infrastructure Reforms

Infrastructure sectors, i.e. water and sewerage, waste, telecommunication, energy, and transport, are subject to profound legal and structural changes worldwide. One of the main reform objectives is to introduce competitive pressure, with the positive effects coming along with it.¹ However, although it has been possible to introduce a more or less effective competition in some parts of these sectors through deregulation and vertical disintegrations, some parts still remain in a monopolistic situation or with considerable market power after these reforms have been introduced. For instance, it has been possible to introduce competition in the production, commercialization and to some extent in the distribution of electricity, but the long-distance transport of electricity remains a natural monopoly. Also, the case of water and sewerage is particularly tragic since a competition in the market is hardly conceivable at all on the local level. In such cases, the only option for competition is to introduce competition *for* the market through franchise bidding.

Because of the special technical and economical characteristics of these sectors, and not at least because of their social and political sensitivity, a regulation after the reforms is necessary and a key element for the ongoing success of reforms. Economic regulation of natural monopolies has the task to enhance allocative as well as productive efficiency while guaranteeing the financial viability of the private firm on the one hand, and on the other hand protecting consumers and firms in competitive sections against the abuses of monopoly power regarding prices and quality in those sectors that remain in the hand of one firm, be it private or public. Additionally, due to the ‘general interest’ character of these sectors, some kind of social regulations regarding equity issues such as access and affordability aiming at redistribution have to be in place in order to guarantee, for example, cross-subsidies or universal service obligations (see, for example, Crémer et al, 2001, Estache, Foster and Wodon, 2002, and Laffont, 2005: chapter 6).²

But corruption, i.e. the abuse of entrusted powers for private benefits, comprising a wide variety of practices such as bribes, fraud, embezzlement, extortion, and collusion, may undermine the objectives of reforms at various levels. For instance, corruption may bias the decision whether to reform and how to reform in the first place. But above all corruption has a lethal effect on competition. Corruption undermines competition *for* the market by overriding the auction mechanism through various channels (see Boehm and Olaya, 2006). And corruption may aim at preventing from establishing effective competition *in* the market where competition would be a priori possible by influencing the agencies responsible for monitoring and regulation. Often, the situation after reforms is particularly favorable to corruption: new public-private interfaces are created,

¹ However, as underscored by Ugaz (2001: 3-4), reforms were sometimes also designed in a way to *restrict* competition even though it would have been possible to introduce competition. In Latin America, for example, Telefónica del Peru was granted exclusive rights for the operation of basic telephone services. The reasons for such a restriction of competition are on the one hand to maximize revenue from privatization, a firm with monopoly power has higher value for private investors, and on the other hand to expand services in order to meet universal service obligations and improve quality, here exclusive rights might attract the needed foreign capital.

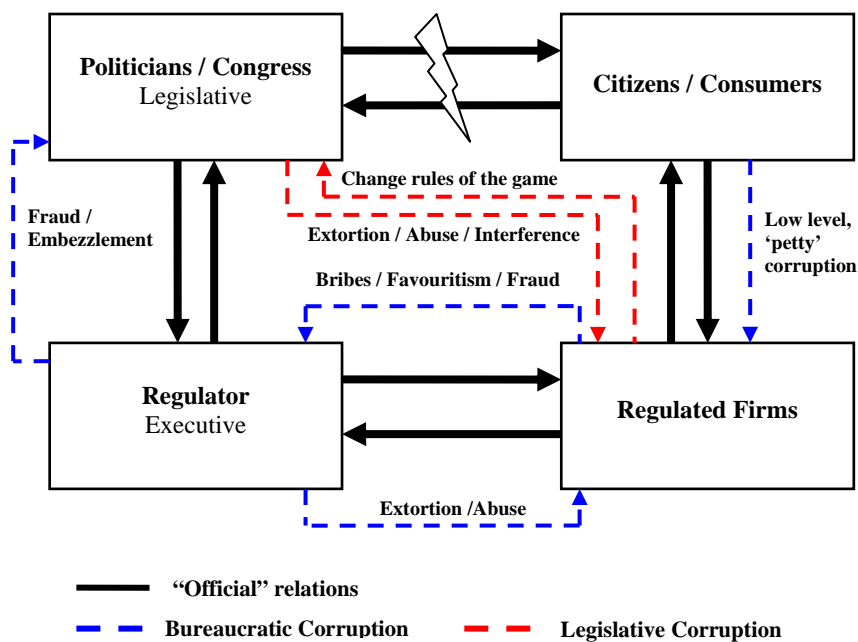
² The redistributive character of social regulations and the often opaque handling of these issues make them prone to corruption—be it by firms, public administration or users. A thorough review of equity regulation under the perspective of corruption is however out of the scope of this paper.

the application of the new regulations may still be unclear, there may be overlapping competences between government agencies, and we encounter a lack of experience in dealing with the new situation. In such an environment narrow interest groups may aim at capturing regulatory processes, either *ex ante* to influence the design of regulations before they are in place, or *ex post*, when regulations are already implemented (Boehm, 2007).

While the concept of regulatory capture is not new, literature has failed to open the black box of how regulatory capture actually occurs in practice: here, the recent developments in the economics of corruption can shed new lights on the problem of capture by analyzing the underlying corrupt transaction leading to capture.³ Only a few papers, such as the contribution from Estache and Martimort (1999), or Smith (1997), and the very illuminating book from Laffont (2005), really mention the problem of corruption in regulation, without restricting themselves to political opportunism and extortion.

The figure below provides an overview on the wide variety of corrupt opportunities in regulatory processes within a principal-agent-client framework.

Figure: Potential Problems of Corruption in Regulation



Source: Boehm (2005: 250), translation from Spanish by the author.

³ The idea of capture can be traced back at least to Montesquieu and Karl Marx, in modern economic literature, the concept has been introduced by Stigler (1971), and later developed by Chicago school authors such as Peltzman (1976), Posner (1971, 1974, 1975), Becker (1983). The idea is also present in the rent-seeking literature (public choice, or Virginia School), for instance in Krueger (1974) or Bhagwati (1982). More recent contributions stem from principal-agent theory from the Toulouse school, Laffont and Tirole (1991/1993), or Martimort (1999), or from authors such as Spiller (1990). Another path is followed by the so-called tollbooth theories; see Shleifer and Vishny (1994), and Djankov et al (2002). For more details on ‘traditional’ theories of regulatory capture and the lessons from the economics of corruption, see Boehm (2007).

Fighting against corruption thus becomes a safeguard for accomplishing the stated aims of reforms: introduce forces of competition into formerly monopolized markets, increase efficiency and provide good quality, while still securing the service to all parts of the country. The aim of this paper is therefore to fill a gap in the literature on economic regulation of public services by providing an overview on how to introduce anti-corruption measures in regulation. The propositions are deduced from findings of the economics of corruption, mainly based upon new institutional economics taking into account the required institutions and specific transaction costs of corrupt deals.

To tackle effectively corruption in regulation, three factors are crucial:

- **Incentives** – incentives provided to the actors
- **Institutions** – institutions of corrupt deals
- **Information** – informational asymmetries and lack of knowledge

Indeed, corruption breeds in opacity: in a crystal clear world of perfect information there would be no possibilities to abuse existing rules in order to derive benefits for own pockets. Not at least because those that are hurt by corruption would be able to interfere and prevent corrupt deals from being settled. But if there is an informational advantage together with discretion on one side, this advantage can be abused and translated into a corrupt informational rent for the better informed. Anti-corruption policies in regulation thus have to aim at reducing informational asymmetries. Since discretion is unavoidable and necessary in regulation, introducing transparency, collecting data and information, and ensuring accountability should be primary objectives for anti-corruption efforts. However, as emphasized by Bellver and Kaufmann (2005: 42):

“Increasing transparency through accessible, relevant, and accurate information is necessary but not a sufficient condition for accountability. Citizens also need the capacity and resources, political and financial, to exercise that right effectively.”

This should remind us that fighting corruption is always also a matter of education and sensitization, not only on a general level but also specifically referring to the media.

Second, the incentives provided to the actors matter. In order to design these incentive structures adequately some lessons can be learned from the principal-agent approach. The principal, i.e. the government, faces on the one hand the problem of adverse selection when contracting his regulators, and on the other hand the problem of moral hazard once the regulators are contracted. The first problem requires the principal to implement mechanisms aiming and impeding opportunistic regulators to apply for the position, or to detect them before they are contracted. And, in order to minimize moral hazard, there are basically two options: rewards and sanctions, along with control.

Third, recent developments in the literature on corruption emphasize the institutional and transaction cost aspects of corrupt deals (see Lambsdorff, Taube and Schramm, 2005). While corruption for a long time was merely considered as a transfer of money or favors between the parties involved, the transaction costs economics of corruption open the ‘black box’ of this corrupt transaction and describe which institutions are required for successful corruption. A new view of anti-corruption promoted by Lambsdorff (2007) follows thus the idea of breaking these institutions and fostering opportunism between the corrupt partners.

In a first step, in section two, we discuss the organizational choices between centralized and decentralized regulation and single- versus multi-sector agencies, as well as the concept of regulatory autonomy. Section three begins with some well-known policy measures derived from principal-agent-theory: rewards, sanctions and control, which will be critically scrutinized. These fundamental points will be supplemented in section 3.2 by applying the institutional approach to the case of regulation. Section 3.3 underscores the central role of information for anti-corruption and as a check against capture. Key measures are presented to reduce informational asymmetries on various levels. Section four concludes.

2 The Role of Structural Organization and Autonomy

2.1 Decentralization vs. Centralization of Regulatory Powers

The structural organization of the regulatory agencies may affect their propensity to corruption. For instance, the question arises whether to localize the regulatory agency on local levels (decentralization) or whether regulation should be centralized. Even though, of course, such organizational issues are based on a wide variety of considerations such as economies of scale or human capital expertise (see, for instance, Laffont, 2005: 171), the susceptibility of corruption and capture is a factor to take into account when designing the regulatory organization.

What are the pros and cons of decentralization regarding risks of corruption and capture? On this, Easterly (1999: 248) is quite unambiguous and claims that: “*It is clear that the incentives for corruption are stronger in a decentralized government than in a centralized one.*” In the case of decentralized regulation there is of course a risk of capture by local pressure groups, and Easterly (1999: 267) underscores that local politicians are usually closely related to the local business elite of a city or region, which makes an independent decision-making and regulation at arms length difficult.

From a transaction cost perspective, these ties (*social embeddedness*) between political and business sphere decrease the costs of corrupt contracting through various channels. Firstly, the persons are known to each other or can easily be presented through common friends or partners. This helps in finding the ‘right’ corrupt partner, decreasing search costs. Secondly, local corrupt networks lower the risks of ex post opportunisms: if a corrupt partner does not stick to his commitment failing to provide the agreed quid pro quo, he will be sanctioned by the group and lose his reputation. Lastly, sanctions can easily be applied, for example, through the cancelling of legal relationships. Conflicts of interests and corruption appear thus to be more likely at local levels—especially in environments where corruption has become endemic.

Note that for the same reasons exposed before, decentralization in environments relatively free of corruption is not so problematic: the lack of corrupt networks and the social proscription of corruption would make corrupt agreements a risky undertaking. So, there is a path dependence related to corruption: On the one hand, corruption, by requiring and fostering certain type of institutions will tend to reinforce itself. In the end, one becomes trapped in a vicious cycle. On the other hand, probity enhances a virtuous cycle, where corruption becomes difficult.

The developments in history seem to strengthen the view of relatively higher corrupt risks on decentralized levels. As Laffont (2005: 179, 183) underscores in his historical review, regulation usually started at local levels. But with time, centralization was introduced, among other also because of corruption. For the case of the USA, Laffont (2005: 179) writes:

“Then when municipalities appeared corrupt, extortive, or unable to deal with firms located in several areas, state regulation began (...).”

On the other side of the coin, decentralization may be helpful to reduce asymmetric information between regulators and consumers, which could counterbalance the influence of regulated firms. On the local level, exertion of influence is not only easier for firms but also for the users. A water, transport, or waste regulator bound to a certain city, for example, can be held directly accountable by the citizens of that municipality. If the regulator does a bad job, such bad performance can be punished indirectly during elections—although the control through elections for such specific issues is of course incomplete and that free elections are not always available. Also, Bardhan and Mookerjee (2000: 3) underscore the important constraints to the potential benefits of decentralization:

“These possibly benign effects of decentralization may however be overturned if local democracy does not function effectively, whether due to capture of governments by local elites, illiteracy and lack of political awareness of voters, and insufficient media attention to local elections. (...) Decentralization experiences may be unfavorable if local government officials lack adequate administrative or technical expertise compared to their central counterparts.”

Nevertheless, with good institutions, access to information for the media, consumer groups and any interested parties, decentralization can be an option for local public services in order to strengthen the link between users and regulator.

To conclude, it is impossible to make a generally valid prescription on whether regulation should be localized on decentralized or centralized levels. Although some important facts point towards higher risks at local levels, decentralization may also generate positive effects regarding anti-corruption efforts. But with weak institutions, high levels of corruption, and strong ties between local business elites and the public sphere, decentralization should be handled with caution.

In order to evaluate risks of decentralization, a case-to-case analysis taking into account the institutional factors of the region considered is thus required. Lastly, even though the question of decentralization or centralization is of course an important issue that has to be taken into account, neither centralization nor decentralization should be viewed as a policy option for fighting corruption (Lambsdorff, 2007). And, as pointed to by Laffont (2005: 221) decentralization of regulation

“...is not incompatible with national or federal oversight concerning corruption issues or some other dimensions of regulation requiring a lot of expertise, such as quality regulation, certification of operators etc.”

2.2 Horizontal Organization: Multi- vs. Single-sector Regulators

Let's turn to the question of horizontal organization. A horizontal separation of regulatory powers in order to reduce the risk of capture and corruption is not a new idea (compare Laffont, 2005: 225). Regarding the issue of separation of regulatory powers, the literature is not always clear: sometimes the authors talk about separation between different agencies, i.e. organizations, and sometimes about separation between individuals. Indeed, the idea to separate regulatory powers in order to prevent from capture is somehow related to the idea of introducing competition between public officials—augmenting the number of individuals to be corrupted hampers considerably the task of the corruptor (compare Klitgaard, 1988: 87, Shleifer and Vishny 1993, Rose-Ackerman 1978: chap. 7 and 8, and Congleton, 1984).

Laffont and Martimort (1999: 233) propose a model where the power of the regulator consists in abusing the information over the regulated firm for own purposes instead of aiming at maximizing public welfare. The regulator can collude with the firms and they can divide the informational rent between them. The principal of the regulator has not the time and resources to effectively control the regulator and to gather the relevant information. The point made by the authors is the following: by separating the powers, the information available for the regulators over the firms is reduced, and thus at the same time their ability to abuse from discretion. Moreover, the authors argue that the transaction costs of collusion between regulator and firm are higher if the firm is faced with various regulators. Along the same lines, Estache and Martimort (1999: 14), explicitly writing about agencies, state that:

“The structural separation between different regulatory agencies can act as a commitment to prevent regulatory capture by some interest groups. For instance, splitting the control rights on the firm's output between a Public Utility Commission and an Environmental Protection Agency helps prevent the capture of the regulatory process by the producer. Several regulatory agencies with specific missions are now each controlling only one dimension of the overall performance of the firm. Their incomplete knowledge about the dimensions that they do not directly observe puts them at a disadvantage vis-à-vis the firm in the collusion game. Their individual ability to extract rents from the firm is then weakened. Instead, if the regulators have been merged, they would be able to fully observe the performance of the firm. Their demands for bribes could perfectly match the supply, i.e., the informational rent which is left to the firm if the regulator behaves in a lenient way.”

The case described by the author is about a regulator seeking to extort benefits from the firm. However, regarding corruption it is questionable whether this argument is valid for two reasons. First, it neglects the fact that, very often, corruption will be initiated by the firms. Indeed, when a firm wants to bribe a regulator it is concerning a specific topic, e.g. to turn a blind eye on the non-compliance with regulation X. So the firm will have to approach the regulator responsible for this particular issue. Why a separation between environmental and economic regulation should diminish such a risk is not clear. Second, specialized agencies may on the contrary be able to gather more relevant information concerning their expertise that could be abused for extortion. This amplifies the informational asymmetry between the regulator and its principal, the government,

and thus augments the scope for collusion with regulated firms. This aspect is somehow related to the discussion of regulatory autonomy discussed below.

A point against specialized single sector regulators is that a centralized multi-sector regulator, responsible for all the public service sectors⁴ could benefit from economies of scale regarding control. But ultimately, just as for the case of decentralization, it seems not possible to derive a final conclusion regarding the horizontal organization of regulatory agencies. The decision concerning this issue has to be driven by other factors (such factors are for example exposed by Laffont, 2005: 224) and coupled with adequate ant-corruption measures taking into account the special circumstances of the country, region and sectors.

The argument of separation of regulatory powers is more interesting regarding the internal organization of the regulatory agency and we will come back to it later in this paper. Separation of regulatory powers leads then for example to prescribing that there should be always at least two regulators in meetings with regulated firms. Since collusion is a risk associated with the separation of regulatory powers (Laffont, 2005: 191), measures aiming at preventing from collusion, such as rotating staff, should be introduced additionally to complicate corrupt agreements between regulators.

2.3 Regulatory Autonomy – A double-edged Sword

A point of pivotal importance for the design of regulatory institutions is the question of autonomy, or independency, of the regulator. Usually, the literature follows the idea that regulators should be independent from political powers. Indeed, firms and investors have to be protected against arbitrary, political decisions and political interference in general, for example in order to seek for votes to gain elections through low tariffs, or to allow for excess employment in order to appease unions. This claim is closely related to the regulatory objectives of assuring the financial sustainability of the firm in the long run, and of achieving allocative efficiency—that is tariffs must reflect costs, including the typically very high fixed costs encountered in the network parts of these sectors.

Even though the reform of public service sectors is a political decision, the following regulation has to be uncoupled from political considerations in order to guarantee foreseeable laws and business environments for the private investors. A firm has to be protected against the political fluctuations and changes due to elections. And indeed, multinational firms usually name the stability of the regulatory framework as an essential factor influencing their decision whether to invest in a given country or not. They fear the situation of ‘lock in’ after having sunk investments in the contract making them vulnerable to extortion and expropriation by politicians. History showed that the threat is real, and thus many authors see the autonomy of the regulator as the panacea for efficient and effective regulation (see, Armstrong, Cowan and Vickers, 1994: 85, Spiller, 1996: 424, and Spiller and Savedoff, 1999).

However, political opportunism is only one side of the coin. Autonomy can mitigate the political capture of the regulatory agency, but it may facilitate corrupt side-agreements between regulators and firms. The corruption literature indicates that such autonomy

⁴ Such as the *Bundesnetzagentur* in Germany regulating all network industries except water, which is decentralised and organised at a municipal level.

together with the resulting discretion and informational asymmetries can result in an environment where corruption can flourish. A complete autonomy of the regulator would only be optimal if one could fully trust in the benevolence of the regulator.

But, this is not the case. First of all, regulators may pursue their own goals which may conflict with those assigned to them in their public function. Second, in praxis, the regulator will always dispose over discretion since the contracts will necessarily be incomplete. And, if autonomy may be a straightforward claim in countries with good institutions, one should be cautious extending such recommendations to other countries with a weaker institutional environment. These reasons, from a mere economic point of view, are pointing towards a limitation of the regulatory autonomy, and the implementation of checks and balances. Moreover, the general interest aspect of public services implies strong political and social considerations. Even if it would be possible to implement autonomy, it is at least arguable if leaving completely aside political influence on the regulation can really be socially desirable.

The design of the regulatory frameworks has thus to take into account this trade-off. The regulator has to be reasonably protected against harmful political influence without becoming uncontrollable by political forces and opening the door to corruption. As underscores Ugaz (2001: 9), “*independence should not be confused with lack of accountability.*” Thus, reducing the discretion of the regulator can be desirable: by reducing the discretionary power of the regulators, the incentives for the firms to capture the regulator diminish, since the regulator simply has not the capacity to respond to the desires of the firms. Thereby fewer resources are wasted into lobbying, rent seeking, and corruption, and welfare is increased.

In a World Bank paper on the debate of regulatory independency, Smith (1997) proposes measures aiming at limiting the discretion of the regulator without falling back to political dependency. The author defines ‘independence’ as “*arm’s-length relationships with politicians, firms, and consumers*”. The measures aiming at safeguarding political independence proposed by Smith (1997: 1) are:

- *“Distinct legal mandate*
- *Professional criteria for appointment*
- *Executive and legislative branches involved in appointments*
- *Fixed terms with protection from arbitrary removal*
- *Staggered terms of appointment*
- *Exemption from civil service salary rules*
- *Reliable funding-such as earmarked levies”*

On the other hand, measures aiming at increasing the regulator’s accountability should be introduced in order to limit the discretionary power available for abuse. These are:

- *“Rigorous transparency—including open decisionmaking and publication of decisions and the reasons for those decisions*
- *Appeals process*
- *Scrutiny of the agency's budget, usually by the legislature*
- *Prohibit conflicts of interest*

- *Subject the regulator's conduct and efficiency to scrutiny by external auditors or other public watchdogs*
- *Permit the regulator's removal from office in cases of proven misconduct or incapacity.”*

While the suggested safeguards against political interference are usually—more or less—met, there is still work to do in assuring the independence from the regulated industry, and in increasing accountability and transparency of regulatory institutions. This, however, is key in achieving an effective competition and to really increase the efficiency of the sector.

3 Anti-Corruption in Regulation

Besides the organizational aspects discussed above, anti-corruption has to consider on the one hand the micro-level of the individuals interacting in regulation and the information problems characterizing the regulation of public services on the other hand.

In a first step, in sections 3.1 and 3.2, we thus present some measures derived from ‘traditional’ incentive theory as well as measures derived from institutional economics of corruption. At the end of this part, in section 3.3, we underscore the importance to tackle the problems of information. Measures increasing information not only hampers corruption but directly increases the quality of regulation.

3.1 Incentives – Lessons from Principle-Agent Theory

A regulator confronted with the possibility to be corrupt has to decide whether he remains honest or becomes corrupt (Klitgaard, 1988: 71). In analogy, a manager in a regulated firm is confronted with a similar decision. In both cases, the individual would trade-off the expected costs from the corrupt behavior against its potential benefits.⁵ Such simple considerations shed light on the points of departure of anti-corruption policies. On the one hand, three pivotal variables influence the decision in favor or against corruption:

- The sanction faced in case of detection
- The probability of detection, for example through control mechanisms
- The transaction costs of a corrupt deal

On the other hand, the decision to remain honest requires a strengthening of:

- The salary (including rewards)
- Moral aspects and motivation

Let’s now consider the standard measures: rewards, control, and sanctions. Granting rewards for efficiency is a standard recommendation in agency theory: if the agent participates in the benefits of his work, he will face stronger incentives to behave in the sense of the principal. But what does that mean for corruption? It is difficult to think of

⁵ It is important to note that corruption benefits from ‘economies of scale’, since the investments into corrupt knowledge are sunk investments reducing the costs for additional corrupt deals.

designing rewards for not engaging into corrupt deals. While efficiency can be measured, the fact of being honest is impossible to observe until the agent was corrupt *and* has been detected—but then it is too late for rewards, and sanctions apply. Usually, because of this problem, the discussion of rewards as anti-corruption instrument focuses on the payment scheme of the public agents.

Firstly, a higher remuneration for the regulatory staff has the task to reduce incentives to accept bribes or other favors. Of course, the higher the remuneration, the higher is the potential loss in case of detection. However, as underscored by Rose-Ackerman (1999: 78) and Klitgaard (1988: 77) such a loss is a one-time punishment, and theory suggests that these do not have, on the margin, a strong impact on the decision whether to be corrupt or not. Also, higher remuneration may ultimately only lead to higher bribes.

But secondly, there are important motivational aspects. A lawyer of the regulated firm will usually be paid more than a lawyer in the regulatory agency; although the risks of unemployment are usually higher in the private sector than in the public sector and parts of the differences in salaries may be interpreted as a risk premium. Nevertheless, this difference, which can be considerably high, may become a problem to the motivation of the staff—even more, if our lawyers meet each other on a regular base. Thus, a reduction of the difference between the salaries could have a positive effect on the extrinsic motivation of the regulator.

Moreover, a relatively high remuneration may create a sentiment of gratitude and of belonging to some kind of ‘elite’ within the public administration. This could help raising the ‘moral satisfaction’, the utility of behaving honestly, and thus reduce the incentives to become corrupt. In other words, the public agent may feel morally obliged to act in the sense of the principal. Under this perspective, measures aiming at achieving such an intrinsic motivation are an important check against corruption. Intrinsic motivation of regulators could be tied with the small size of the staff and the high degree of qualification usually required for working in a regulatory agency.

To recapitulate, direct rewards for behaving honestly are difficult to imagine. Indirectly, however, remuneration and building up a kind of ‘elite’ feeling fostering the intrinsic motivation of the staff may raise the incentives to not engage into corruption. Measures to foster this comprise:

- Small and specialized agencies
- Reducing the difference between private and public sector payments
- Hiring of well trained staff and offering the perspective of ongoing training, for example through contacts with universities (masters for example)
- Information sharing and building of networks with regulators from other countries during regular conferences, work shops etc.
- Conscience building regarding the social objectives and importance of regulation (seminars, conferences etc.)
- Good and fair working conditions

On the other side of the coin are sanctions and control. Internal and external control mechanisms have to be established to augment the risk of detection. As a consequence, there have to be clear rules concerning the sanctions to be expected in the case of

detection of an action that goes against the rules and objectives of regulation. Sanctions usually entail a public or criminal lawsuit ending in monetary fines, the loss of the public office and the right to apply for other public offices, and even in imprisonment.

So, how to improve control? First, accountability must be facilitated through clear and transparent documentation and internal auditing procedures. Clear and standardized rules of behavior have to be introduced in day-to-day business with well defined responsibilities. Documents, reports, and data concerning decisions-making should be available on the internet for anyone interested. Decisions must be verifiable and reproducible. In order to minimize risks of fraud, proper accounting is crucial: receipts and bills must be checked, and expenses, if possible, related to responsible persons. Technical issues and decisions should be taken in working groups and not by single regulators, and tracks on the decision-making process should be recorded.

Second, potential conflicts of interests must be detected. Conflicts of Interests are defined by the OECD and IADB (2004: 4) as

“...a conflict between the public duty and private interests of a public official, in which the public official has private-capacity interests which could improperly influence the performance of their official duties and responsibilities.”

According to the OECD, it is a pro-active concept, aimed at detecting corrupt potential before it translates into corrupt deals. Detecting a conflict of interest allows managing this risk of corruption without having to judge the moral integrity of the individual holding the considered position. Further, a transparent handling of conflict of interest situations permits the regulator to publicly commit to his anti-corruption strategy. The OECD (2003) developed a toolkit helping at identifying potential conflicts of interests between the public duty and private interests, and could be consulted and applied in regulatory institutions.

In addition to these internal mechanisms, there should be external control of the regulatory agency by independent auditors. But it has to be taken into account that external monitors may be captured as well, and the solution would certainly not consist in controlling the auditor by another ‘independent’ auditor. External controls on an irregular basis should be more effective and more resistant against collusion between auditors and audited institution than regular and institutionalized controls—this should also reduce the costs of external monitoring, including its bureaucratic burden. ‘Soft’ external control by interested third parties seems to be an even better way of control. Indeed, as underscored by theories of competition among pressure groups (Becker, 1983), bringing in diverging interests into processes provides checks against capture and will lead to a more balanced outcome of regulation. The provision of detailed information by the regulator to interested third parties is of pivotal importance for the working of ‘soft’ external controls by civil society groups, media, and even single users of public services; this aspect will be discussed in section 3.3.

However, controls and sanctions are costly to apply and their benefits are not always clear. Of course, standard punishments are necessary, but it has also to be kept in mind that control and sanctions may have negative effects on the intrinsic motivation of the staff, which, in turn, could play an important role in preventing corruption. Moreover, higher expected sanctions and better control may just lead to a higher bribe because the corrupt agent includes a higher risk premium. Also, inflexible and high sanctions may work as an enforcement mechanism for already existing corrupt agreements, since the

fear of punishment prevents from eventually denouncing the transaction. Lambsdorff (2007: 148) underscores this particular perverse effect of sanctions:

“...sanctioning even minor malfeasance can backfire. If those guilty of negligible malfeasance have to fear severe prosecution, they may become entrapped in a corrupt career. Repression would become ineffective if it does not provide an emergency exit for the petty sinners.”

3.2 *Institutions* – Transaction Costs of Corrupt Deals

Following Lambsdorff (2002/2007) a corrupt transaction can be divided into three phases: contract initiation, contract enforcement, and the aftermath. The first phase includes tasks such as seeking the ‘right’ partner and negotiating the contract conditions of the deal. Contract enforcement, in turn, has to fall back on a set of institution such as the exchange of hostages or the building of reputation, since a corrupt contract cannot be (and has not to be!) enforced by courts or other legal arbitration instances. After the corrupt deal has become effective, both parties hold potentially damaging information on the other. Thus, there always remains a risk of denunciation or extortion.

Understanding how a corrupt deal is arranged and the institutions required for a good working of corrupt deals can provide essential information on how to effectively break up (ex post) and render difficult (ex ante) such type of agreements. This is what Lambsdorff (2007) calls the ‘*principle of the invisible foot*’. Anti-corruption measures building on this idea should thus hamper the get-together of potential corrupt partners, impede the enforcement mechanisms, and, last but not least, foster opportunism between corrupt partners. The following enumeration provides some hints for anti-corruption:

- **Rotation of regulators.** By changing the persons which are in contact with staff from regulated firms on a regular base, two effects are enhanced. Firstly, the information concerning the firm is divided between various regulators, diminishing thereby the informational asymmetry within the regulatory institution and thus the scope for abuse and collusion with managers from the firms. Secondly, the establishment of close relationships is complicated, although not eliminated, and thereby the possibilities to test for disposedness to corruption and to initiate corrupt deals in a friendly manner. Rotating regulators in contact with regulated firms hampers not only contract initiation, but also the enforcement of corrupt contracts, by preventing from establishing too close relationships and dependences which could serve as enforcement mechanisms.

- **Visits only in teams.** Regulated firms or meetings should always be visited in teams of at least two regulators—and, if possible, in rotating teams. Corrupting two officials entails a higher risk, not only ex ante, during contract initiation, but also ex post, duplicating the risks of denunciation, extortion, or other kind of ex-post opportunisms. For instance, during interviews conducted by the author in 2006 with the Colombian water regulator, it was reported that although there does not exist any written rule stipulating such a strategy, it has become an informal rule to never be alone during contacts with managers from regulated firms.

- **Anonymity.** Relationships between regulators and regulated firms should be made anonymous when possible. In this special case, *less* transparency can hamper the

establishment of corrupt deals. Also, anonymous decision-making, i.e. when regulated firms do not know who exactly is responsible for a decision, may foster opportunism on the regulators' side.

- **Prevent from revolving door.** Regulators are usually disqualified from working for the private industry they have regulated over a certain period of time. This disqualification should be high enough, in order to hamper the enforcement of corrupt contracts where the regulator delivers a corrupt favor in the first step and the manager has then to provide the quid pro quo.

During the expert interviews conducted in Colombia, it has been pointed to the problem of experts working on a contractual base for a given time or project for the regulatory agency. Indeed, such experts are not considered as civil servants. In particular, such *contratistas* can switch from the regulator to the regulated industry and vice-versa without time constraints, while public officials are facing a one-year period where they cannot work for the regulated private sector. The potential problem is not negligible: the size of the staff having the status of a civil servant belonging to the ministry (*funcionarios*), including secretaries, drivers etc., is relatively small, while there is a relatively high number of external experts. In the water regulator (CRA) the relation *contratistas/funcionarios* at the time the interviews were conducted was 22/52, for the energy regulator, CREG, 25/30.

As a rule, experts only temporarily working for the regulator could be obliged to sign comparable obligations in their contract as well. However, it is likely that without this flexibility to switch from public to private sector, contracts with the regulator will not be attractive for freelance experts. Rather, an adequate staffing should be envisaged and external experts only be contracted if really necessary.

- **Provide incentives not to deliver the quid pro quo.** In the case the quid pro quo is expected to be delivered by the regulator, regulators that have accepted a corrupt deal and have received, for example, a bribe, but wish to withdraw before providing the corrupt service should be supported through adequate rules governing such cases. This would furthermore raise the risk for managers to initiate a corrupt deal, since they cannot be sure they will receive the corrupt favor.

- **Encourage whistleblowing.** Ex post opportunism has to be encouraged and promoted. Corrupt actors, or persons having information about corrupt deals, who wish to denounce the deal, for example to ombudsmen or prosecution agencies, have to receive, at least partly, attenuated punishments or even be exempted from any sanctions. Lambsdorff and Nell (2005: 3), for example, propose to introduce an asymmetric design of sanctions faced by corrupt actors to foster betrayal:

“... expected criminal sanctions for accepting gifts should be low and those for illicitly providing favors high; in turn, expected penalties for giving gifts aimed at achieving influence should be severe (with a provision for leniency), while those for accepting illegal favors mild.”

Moreover, the authors plead in favor of granting immunity for gift-giving in order to undercut the trust in reciprocity (ibid: 10). Usually, most anti-corruption legislations provide for symmetric sanctions. Reform could thus include that regulators shall be exempted from legal prosecution when they accepted a bribe but report the intended case of corruption.

It is even possible to think of rewards for whistleblowers, which would introduce a high degree of risk into corrupt deals from the beginning on. Further, whistleblowers have to be offered effective protection (crown witness protection programs etc.), especially in regions where corruption is linked to organized crime or paramilitary groups. If this is not the case, it is unlikely that corrupted public agents will denounce or withdraw from a corrupt deal because of the fear of getting punished.

Martin (2003: 120) enumerates some classical approaches to whistleblower protection such as “...*the establishment of formal procedures, including grievance committees, ombudsmen, auditors-general, anti-corruption agencies, courts and whistleblower laws.*” Because of the weaknesses of such ‘traditional’ measures, Martin (2003) proposes rather to fortify the skills required for a whistleblower. These are, among others: skills on how to collect data, on how to use the media, and on how to use support. Even though of undeniable importance, these aspects can only be additional to official whistleblower protection. On the contrary, detailed knowledge on what will happen after whistleblowing may, without an adequate framework of whistleblower protection, rather discourage potential whistleblowers.

- **Introduce corporate liability rules together with individual liability.** ‘Fall guys’ are managers bearing the whole risk of a corrupt deal; if the deal is detected, the culpable is the ‘fall guy’ and the firm denies any involvement. In order to circumvent this strategy, rules should stipulate that the firm in case of corruption has to be held responsible for the actions of their managers. There are indeed no valid reasons why high-placed managers of a regulated firm should not be held responsible. Also, with corporate liability, firms will face incentives to design internal rewards and sanctions in order to avoid liability (Seubert, 2005: 28).

3.3 *Information – Fostering Transparency and Knowledge*

Public service sector regulation is characterized by a variety of informational problems, and it is possible to identify at least five levels:

- **Level 1:** Between government (legislative powers) and regulatory agency
- **Level 2:** Between regulatory agency and regulated firms
- **Level 3:** Between users/civil society/media and regulator/government/firms
- **Level 4:** Within the regulatory agency between experts and non-experts
- **Level 5:** Among (competing) regulated firms

In the following, we present measures in order to improve the informational situation. Many measures have positive overlapping effects on information on other levels.

Level 1. The regulator knows more about the regulated firms as the government. This empowers the regulator to conceal information about the regulated firms, to collude with them, and share corrupt gains. The regulator may also defraud the government and embezzle funds. Measures have thus to improve information concerning the decisions of the regulator, and information on which these decisions are based. For example, regular reports to the government including detailed information in annexes should be provided. In case of decentralized regulation, a central agency responsible for all sectors and regions could be implemented, hampering thereby the capture on lower levels (see,

for instance, the Bolivian case in Laffont, 2005: 206, or the *Superintendencia de Servicios Públicos Domiciliarios*, SSPD, in Colombia).

Level 2. However, there remains the problem of fraud, as the Enron case has shown in an impressive way. Fraud becomes possible because the firm has an informational advantage respective to the regulator regarding its cost structure, its demand, and technical details. The firm can provide false information and manipulate its books in order to foster regulatory decisions that are favorable to her ('creative accounting', cost shifting etc.). Thus, augmenting the information concerning the firms available to the regulator has positive effects on the bargaining power of the regulator and diminishes the risks of fraud, such as creative accounting, cost shifting, false invoicing etc. Indeed, improving information on this level has effects on the probability of detection.

One way to cope with this informational problem is to introduce some form of yardstick competition as proposed by Shleifer (1985). Since the regulator cannot observe the costs, the idea is to let the firm compete with an efficient virtual firm, or with the other regulated firms, when they are sufficiently comparable or when differences have been taken into account. It seems to be an interesting way to overcome information problems and moreover limits the discretionary power by politicians and administration. But the parameters of the benchmark firm, as well as the calculation of these parameters, have to be managed in a transparent way, and information has to be made available to all stakeholders. However, in the case of yardstick competition amongst regulated firms, Shleifer (1985: 327) acknowledges that horizontal collusion could undermine the aims of yardstick competition.

Another problem encountered by regulators is that firms may 'tailor' the information provided according to their interests. For example, depending on the issue of the request of information, a regulated firm may declare higher or lower costs. This problem can be circumvented by a central management of information, such as the unique system of information (SUI) implemented in Colombia (see box below). Such a centralized and standardized system presents advantages regarding the efficiency of information management and reduces the arbitrariness of provided information by regulated firms. However, corrupt side-agreements with public agents working for the SUI are not excludable, and a case of manipulation would have, because of the centralized system, a huge impact on various levels. Such high stakes in a manipulation may increase the incentives to actually try to capture and abuse the system. To implement anti-corruption strategies in such settings becomes thus particularly important.

Box: The Unique System of Information in Colombian Regulation

In order to counter the problem of need-tailored information provided by regulated firms Colombia implemented (law 689 from 2001, art. 14, 15) the so-called Unique System of Information (SUI, *sistema único de información*). The system is under the responsibility of the SSPD (*Superintendencia de Servicios Públicos Domiciliarios*), which is in general responsible for gathering and providing information, controlling the providers, for the certification, and further serves as arbitration instance for public services across all sectors.

The idea is to have a centralized and standardized system of information accessible to all the regulatory commissions, ministries and public entities requiring information on public service sectors. In this system, the regulated firms have to fill out standardized forms concerning technical and accounting details and data. The system shall eliminate inefficiencies in the

information gathering processes, help to mitigate problems of asymmetric information, and facilitate control by the SSPD. Public entities receive detailed information on desegregated levels, by becoming an online access to all relevant data. Aggregated reports are available for the users and other interested parties.

For more information: <http://www.sui.gov.co>

In any case, information gathered on the regulated firms should be publicly available in order to avoid problems related to informational asymmetries on other levels. There is no reason why information about the firm providing the public service, accounting data for instance, or about its market should be held secret. Private firms wishing to operate in public service sectors are fulfilling a purpose of general interest on behalf of the general public and should thus be held accountable by all stakeholders. As Palast, Oppenheimer and MacGregor (2002: 14) put it:

“The clubby atmosphere of a dark-paneled room can impart an air of reason to utility claims, which, in a public meeting, could not withstand a single skeptical question. The US rule regarding such secret meetings between regulators and the companies they regulate to discuss pending price proposals: they are prohibited by law.”

Laffont (2005: 18) points to a further benefit of open access to accounting data:

“Making cost information public may be a way for the regulator to improve the quality of accounting by fostering more truthful disclosure of information by the firm, establishing its credibility for honest behavior.”

To sum up, level 2 information can be enhanced through the following measures:

- Clear and standardized accountability rules for regulated firms, perhaps following the example of the Colombia SUI system
- Special training for accountants in regulatory institutions in order to enable them to detect fraud.
- Cooperation with local universities to collect data on demand structures, ability and willingness to pay, etc.
- Introduce yardstick competition, use benchmarking techniques (benchmarking is facilitated by standardized information systems as used in the Colombian SUI).
- Information gathered on the firm should be publicly available (requiring a suspension of business secrecy) to prevent from collusion between regulator and firms.

Level 3. Although being one of the most important stakeholders of regulation, users of public services usually are not well informed about the details of regulation, and in most cases are completely left outside the formal processes. Also, civil society groups and media are usually not able to access required information concerning regulatory issues. This selective secrecy creates room for both collusion between government and firms, and for populist measures. As emphasized before, available information should be made accessible to all stakeholders. Bellver and Kaufmann (2005: 43) underscore the benefits of open access to information:

“Once the institutional files are open to public scrutiny, it becomes difficult for any government to backtrack or be selective about the information that is going to be

accessible, and it is only a matter of time before demands for transparency in other areas arise. In fact, international financial institutions and multinational corporations are already being the target of those demands. Breaking up the monopoly of information will empower civil society in developing countries to participate in discussions about their own future.”

However, as participation must be real. As underscored by Palast, Oppenheim and MacGregor (2002: 20-21), consultation is not the same as participation, which would require that user groups (and other stakeholders) are officially included into the regulatory decision-making. For example, they should assist meetings between regulators and regulated firms, and above all, have *full access* to all relevant information. The authors even state that

“...the right to comment, as opposed to participate with full information, is often worse than nothing at all because opportunities to comment lend to false legitimacy of autocratically made decisions (ibid: 22).”

For the Colombian case it could be suggested to open the access to the disaggregated data of the SUI for any interested party in order to enable real participation of interested stakeholders.

Further measures aiming at fostering civil society participation include:

- An effective management of complaints regarding behavior of firms.
- If possible, consumer groups should be granted help in overcoming free-rider effects and independent civil society groups should be assisted.
- Representatives of the media should be invited to participate in regulatory processes in order to raise the interest and the conscience of the media on the topic of regulation.
- The exchange of information and the cooperation between regulators and universities should be intensified.
- Again, the myth of required business secrecy has to be overcome.

Level 4. Informational asymmetries *within* the regulatory institution are usually not considered in literature. For example, there are considerable informational asymmetries between experts and non-experts, in particular regarding accounting data (accountants) but also regarding technical issues (engineers). Such type of informational asymmetries may also arise if one individual regulator is responsible for a certain project in relation to a firm. During his work, he can collect valuable information which is only known to him. Other regulators have not the capacity to oversee the details of the work carried out by the expert. This informational advantage can be abused to collude with firms, concealing or falsifying information in exchange for favors, bribes or future job offers in the private sector.

Reducing this asymmetry is very difficult. Measures aiming at counteracting asymmetries between experts and non-experts could include:

- Fair remuneration and good working conditions.
- Rotation of experts in vulnerable places.
- Traceable, verifiable and reproducible decisions that could be revised on an irregular basis by external experts.

Not at least, increasing information within the regulatory agency should also be understood as fostering knowledge within the staff regarding the costs and effects of corruption and regulatory capture. Anti-corruption should not be perceived as the ‘job of the watchdogs’, but as an undertaking requiring the participation of the whole staff. General training of staff regarding the problem of corruption and anti-corruption strategies is an anti-corruption strategy on its own.

Level 5. Regulated firms in a more or less competitive environment, for example telecommunication or energy commercialization, can be trapped in a kind of prisoner’s dilemma situation. This is also a problem of deficient information. Each single firm does not know whether the competing firms recur to corruption as a strategy for dominating the market. The dominant strategy for each firm is then to use corrupt methods as well. Even though ultimately all competing firms could win from being honest, since they would economize on the costs issuing from corruption, they cannot incur the risk of being the only honest firm in the market.

In order to fight such situations, institutions signaling *credibly* to the competing firms that everyone will remain honest are required. Voluntary codes of conduct and other private sector initiatives could play an important role in effectively overcoming the problem. However, codes of conduct are always prone to be abused for mere window-dressing purposes. In Boehm and Olaya (2006) we presented the Integrity Pact (IP) from Transparency International as a means to avoid prisoners’ dilemma situations in public auctions. This could inspire an integrity contract between regulators and regulated firms, supervised by a civil society organization with access to information.

4 Conclusions

This paper presented ways to mitigate the risks of corruption and capture in public service sector regulation in order to safeguard the establishment of competition and the objectives of reforms. An important insight is that recurring exclusively on traditional anti-corruption strategies oriented on increasing control and applying stricter sanctions are problematic for two reasons. On the one hand, they are costly and may have negative repercussions on the intrinsic motivation of the regulatory staff, which could precisely play an important role in preventing corruption in the first place. On the other hand, strict sanctions may backfire, since they may only lead to higher bribes or may even serve as an enforcement mechanism for corrupt deals preventing from whistle-blowing.

Rather, efforts should be made to increase the transaction costs of corruption and to foster opportunism between the corrupt partners. Where such opportunism is likely to occur, corrupt deals will lack stability *ex post* and thus attractiveness *ex ante*. For that reason, for instance, the get-togethers between regulators and managers of regulated firms should be handled in a way to impede the establishment of too close relationships, sanctions should be designed in a way to provide incentives not to deliver the *quid pro quo*, and ways to foster whistle-blowing must be implemented.

Because of the informational asymmetries characterizing public service sector regulation and constituting the root for the opportunities of corrupt deals, the introduction of transparency is of pivotal importance. Transparency in this case translates into increasing information at different relevant levels of the regulatory

framework, but ultimately requires the necessity to increase real participation of users and civil society groups in regulatory processes. This would push regulations' outcome towards the idea of an interest group competition as described by Becker (1983).

However, real participation requires access to *all* relevant information, and this will face considerable protest from the firms pointing to business secrecy, albeit providing a public service of general interest. But, the fact that full access to information is not common practice in most regulatory schemes worldwide mirrors the strong influence of firms and the absence of representation of users' interests. Although such participation is of course no panacea to the problem of corruption, it nevertheless provides important checks against capture. The myth of required business secrecy has to be overcome.

Not at least, a quite important factor regarding anti-corruption strategies is the environment in which regulation takes place. Corrupt environments will of course require more efforts and different strategies than in environments characterized by clean and strong government structures and institutions. The design of any anti-corruption strategy should thus begin with a thorough evaluation and analysis of the prevailing conditions in the region, municipality, and sector to be considered. As some general guiding indicators it can be resorted on statistical tools such as the CPI (Corruption Perception Index) of Transparency International, or the Worldwide Governance Indicators on the World Bank Governance & Anti-Corruption website. But ultimately, grassroots knowledge is required and case-to-case analyses have to be carried out through expert interviews with private sector, governmental institutions, and civil society organizations in order to draw a picture of the particular situation.

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