

Contracting with Governments

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This version: March 14, 2009

0. Introduction

There exist a tremendous number of studies in strategy and management journals concerning contracting issues between private firms. Those studies are usually grounded in competing theoretical frameworks such as transaction cost economics, the resource-based view of the firm, incentive and agency theories and few others. However very few studies, especially in those reviews (this is also true to a lesser extent in economic journals) are concerned with the issue of contracting between private firm and government. This is particularly surprising since existing theoretical frameworks qualified to tackle contracting strategies between private firms can also provide insights into issues related to contracting with government.

This relative deficit of interest is also astonishing considering the importance of issues at stake. The last thirty years have seen intense debate about the ability of the private sector to provide a variety of public services more effectively than the government. In the US throughout the 1990's, privatization and deregulation of infrastructure were common prescriptions to deal with perceived public sector inefficiencies. Events such as the crisis resulting from the deregulation of the California energy sector, as well as the view that some privatization efforts failed, have contributed to a shift toward use of public-private partnerships in the US, across Europe, in Canada and in many developing countries (See Blanc-Brude, Goldsmith and Valila (2007) for a survey of Europe; Estache (2006) for a survey of developing countries). A number of countries have then passed or are in the process of proposing legislation aimed at authorizing public private partnerships (PPP), and are hence attracting private finance to the infrastructure area. In the US, PPPs are most common for projects involving highway and road transportation (see Engel-Fisher-Galetovic 2006), rail and water. Furthermore, even if the name PPP has only recently been employed in the United States, over the years many projects have already been financed through the municipal finance market and many also involved the private sector in one way or another, through privately-owned or operated projects serving public purposes. Water, power, waste disposal, education and healthcare are examples. As pointed out by Levin and Tadelis (2008) such "local government service provision is important from both an economic and public policy standpoint. Local government spending (counties and cities) equals about one percent

of GDP in the United States, so there are potentially large gains to be realized from efficiency improvements". And such agreements are actively encouraged by Federal Departments (DOT 2007). In 2004-5, 205 national PPP contracts were signed worldwide worth 52 \$US billion in investments (PWC, 2005).

Despite this growth of interest, evidence on PPP performances remains mixed. On the one hand, PPP projects in the UK seem to be delivering cost and time savings compared to traditional procurement structures (Arthur Andersen and LSE 2000). On the other, PPPs have sometimes resulted in higher prices (Chong & al 2006), renegotiations (Guash 2004), rigidities (Engel & al 2006) and mixed surplus redistribution giving rise to a "divorce" of such contractual agreements in many developing countries (Estache 2006).

Coordination problems raised by contracting with governments are very similar to the "make or buy" classical choice made by firms and already studied extensively (see Sykuta 2008 for a survey). Nevertheless, such transactions give rise to specific problems to deal with by private managers because of 1/ the characteristics of the transactions handled in public private contracts, 2/ the specificities of the government as a contractor submitted to many influences and 3/ the particular environment in which such agreements are embedded due to the institutional constraints built to control potential government drifts (Williamson 1999, Spiller 2008).

In this chapter we review contracting issues raised by a government's decision to contract out activities linked to public services, as well as highlighting potential future research avenues. We first review the different kinds of contracting arrangements and public private partnerships used by government to contract out their activities. In Section 1, we highlight the difficulties linked to the specificities of the arrangements between the government, considered a competent and benevolent dictator, due to complex information and commitment issues. We focus on the different sources of contractual failures resulting from contractual incompleteness and from imperfect competition among the potential private providers of public services. We then focus on the specificities of the relationship between the private and public parties that might be non-benevolent and therefore submitted to specific constraints to control potential disfunctioning like corruption, (see Section 2). Lastly we consider the "government" no longer as an homogeneous entity, but as a complex, multi-purpose organization submitting third parties to specific hazards (Section 3). Suggestions for further research follow in the conclusion.

1. Contracting With Governments: Selection and Commitment Dilemmas

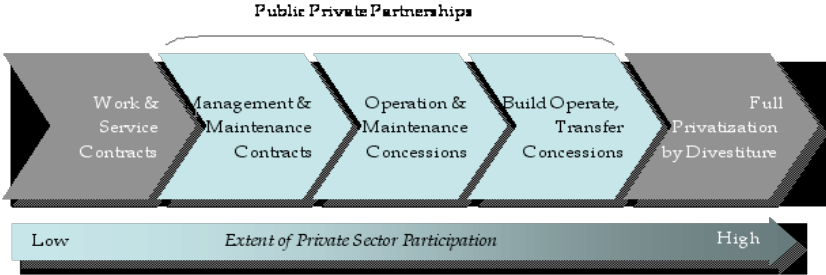
The government as well as firms faces contracting choices. First on the list is deciding whether to make or buy public services to be provided to citizens. Even when the decision to provide services directly to citizens is retained, the government might sign contracts with private partners in order to invest in the necessary infrastructures. Depending on the nature of the transactions at stake, contractual problems might arise. In this section, we first return to the different kinds of contractual agreements a government might sign, stressing the fact that long-term contracting involves high transaction costs (Section 1.1). We point out the fact that this is mainly due to incomplete contracting issues (Section 1.2) then describe potential contracting

problems (Section 1.3). We conclude by stressing lessons to be learnt for private operators’ strategies (Section 1.4).

1.1. The Specific Nature of Public Private Contracting

The debate about the proper scope of government and the way to organize services that are contracted out does not concern all services with the same intensity. Furthermore, public private partnerships take a variety of forms that generate specific contracting issues (see Graph.1).

Graph 1. Public Private Partnerships



More precisely, it is useful to distinguish contracts for a one shot service or transaction from those dealing with a private operator investing in durable assets in order to provide a public service through a long-term relationship. The first kind of transaction (usually called “work or service contracts”) raises the issue of how to organize ex ante competition in order to sort out the best offer – that is, the offer that generates the highest social surplus. It generally takes the form of a call for tender with a short-term or even spot contract. The latter (usually called public private partnerships, embracing several kinds of contractual agreements such as concession, lease, BOT, BOOT, etc.) is more problematic. Difficulties arise because PPPs cover different transactions such as design, building, operation and financing of the infrastructure, which makes it more difficult to define and contract on cost and quality dimensions. Furthermore, because of the high level of specific investments, such agreements are long-term (i.e. typically 25-30 years long).¹ This implies a need for flexibility and adaptation, probably more intensive than in more traditional procurement relationships. Also there are concerns about the risk of hold-ups. And lastly, such contracts concern public services. Deviations can have a high impact on the population (Williamson 1999).

Historically, studies of contracting with governments have been linked to discussions on the limit of state intervention and the idea that regulatory intervention to deal with “market failures” may well lead to their replacement by “regulatory failures”. In this spirit, Demsetz (1968) argued that even when natural monopoly precludes competition within a market, competition for the market *via* contracts between public and private agents could lead to an efficient allocation of resources that avoid regulatory failures. Another way to present Demsetz’s argument is to say that PPPs might be a hybrid form of organization, lying between internalization and market solutions, and avoiding public hierarchy and market failures.

This idea has since been challenged. Critics such as Williamson (1976) have raised several fundamental issues with Demsetz’s monopoly franchise bidding procedure:

¹For example, in their study of water contracts in force in 2001 in France, Chong & al 2006 found that several contracts still valid at the time were signed at the very beginning of the 20th century (i.e. more than 90 years ago).

organizing competition for the market is not an easy task, the world is not static, transaction costs make contracts necessarily incomplete and switching costs make public authorities and private contractors entering contracts vulnerable to ex post contractual opportunism. That is why PPPs are characterized by their own failures. Clearly the Demsetz argument assumes that asymmetric information issues can be resolved through incentive mechanisms (i.e. by organizing a competition for the field, public authorities give incentives to private firms to reveal their cost). Williamson's answer is based on a broader picture of the world, incorporating transaction costs and incomplete contracting issues.

1.2. Complete vs. Incomplete Contracting

Problems arising with PPPs are partly due to asymmetric information issues. This is common to all contracting arrangements and not specific to contracting with governments. In a world of complete contracts, the incentive theory provides a rigorous framework for analyzing such contractual problems. The government does not know the private operators' characteristics perfectly, especially their efficiency. The theory shows that an adequate "menu" of contracts incites private operators to reveal their private information and maximize efforts to reach the best performance (Laffont and Martimort 2002, Malin and Martimort 2002).

However the theory does not deal with the potential limited capabilities of the parties and the uncertainty of the context in which they must make decisions.² As a result, the incentive theory has little to say about the scope of government in the specific context we are dealing with. Moreover, propositions made by the incentive theory are based on assumptions that are clearly not met in public private contracts (Laffont 2000). The main one is the credible commitment needed for those contracts to keep their incentive properties: The public side of the contract is subject to complex objectives that may change over time (because, for instance, of changes in the majority of voters). Agreements may well become misaligned with the objectives of the government who has incentives to renegotiate or even denounce the contract.

In order for this theory to deal with such issues, models should "*take into account various forms of transaction costs and the fact that these lead to various contract incompletenesses that can be easily described*" (Laffont 2005: 129). Including transaction costs in analysis results in the identification of potential contractual failures not generated by the sole information asymmetries and mainly due to contractual incompleteness (Laffont 2005). These issues are discussed in further details in Section 2, where we focus on the specificities of the government as contractor that might be unreliable.

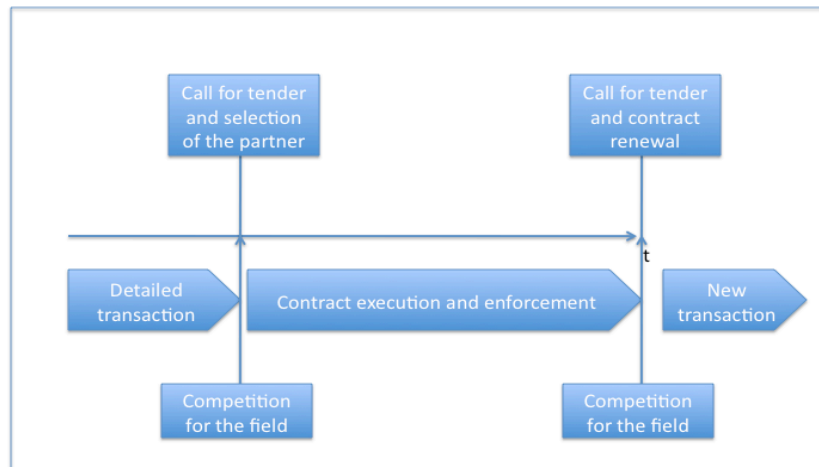
1.3. Failures in selecting, contracting and renewing an operator

From the government's perspective, governing incomplete contracts would be a second rank and even a negligible issue if it were possible to efficiently select ex-ante an efficient and honest provider, and if the latter feared potential non-renewal of the contract in case of (opportunistic) deviation. There are, however, unavoidable biases when granting public projects to private operators. Generally, PPPs are characterized by

² This refers to the general limits of the theory highlighted by Malin and Martimort (2002), "*incentive theory has nothing to say about such things as the distribution of authority within an organization, the limits of the firm, the separation of the public and private spheres of the economy, and more generally nothing to say about organizational forms and designs*".

a call for tender (i.e. competition for the field) followed by a long-term contract and potential renewal phase characterized by a new call for tender (see graph 2).

Graph 2. Public private contracts - crucial issues



Source: Saussier-Yvrande 2007

Each of these three phases give rise to specific issues discussed in the next section in the context of an efficient and consistent government seeking to maximize social welfare. More precisely, the selection issue is a crucial one, leading to difficulties in selecting the best private operator in charge of the public service. This might be due to the complexity of the deal, or the difficulty in enforcing contractual agreements (Section 1.3.1). Equally crucial is the capability of the government to re-address this issue at the end of the contract (Section 1.3.2).

1.3.1. The selection process and ex post renegotiation issues

The first problem public authorities face is organizing competition for the market in order to select the most efficient partner to carry out works or provide a service. This is also a problem for the managers of private firms, depending on the nature of the implemented selection process. This is challenging because PPPs cover different steps such as design, building, operation and financing of infrastructure. Choices in these matters are interdependent, blurring the boundary between competition and negotiation. At the selection phase, the set of information in the hands of public authorities is never complete because the competitors cannot envisage all possible scenarios when planning the project. Furthermore, scoring rules used in award procedures need to account for a variety of cost and quality dimensions (Williamson 1976), which are finally difficult to reconcile. The chances of making the “right” choice are in any case small because of possible errors in firms’ bids (Section 1.3.1.1) or possible strategic behaviors (1.3.1.2)

1.3.1.1. Winners’ curse

Because there is usually no competition in the market when the contract concerns a long-term public service, the government organizes competition “for the field” instead of a competition in the field. But according to auction theory, an increasing number of bidders might not always enhance the quality of the selection process, depending of the type of auction and the characteristics of the delegation selected. Common-value

auctions are characterized by the winner's curse effect; an adverse selection problem arising because the winner tends to be the bidder with the most overly optimistic information on the value of the contract. If a bidder bids naively, on the basis of its private information only, this could yield an ex post negative profit.

In equilibrium, we might expect a rational bidder to internalize the winner's curse problem by bidding less aggressively (Milgrom 1989). In common value auctions, an increasing number of bidders has two counteracting effects on the bidding strategies of managers. On the one hand, the competition effect leads to more aggressive bids. The more the bidders, the more aggressive one bidder should be to maintain its chance of winning. On the other hand, the winner's curse effect becomes more severe, inciting bidders to prudence. Depending on the relative size of these two effects, the impact of the number of bidders on the winning bid might be positive or negative.³ This has implications on the managers' strategies. The higher the number of bidders, the higher probability the winner's profit will be negative. To be immune from the winner's curse effect, bidders should then mark-up the estimation of their costs (mark-down their estimation of the value of what is being auctioned), the size of this mark-up increasing with the level of competition (*i.e.* the number of bidders).

Several empirical studies confirm such effects. Hong and Shum (2002) analyzed bid data from construction procurement auctions ran by the New Jersey transportation department. Their results indicate that for a large subset of these auctions, the median procurement cost rises as competition intensifies: increasing the number of bidders from three to six, raises median procurement costs by about 30%. Their result overturns the common economic wisdom that more competition is always desirable (from a public authority perspective). In the same vein, using an original database of 49 worldwide, toll road concession contracts, Athias and Nunez (2008) show that bidders bid less aggressively in toll road concession auctions when they expect more competition (*i.e.* the winner's curse effect is extremely powerful) and bid more strategically in weaker institutional frameworks where renegotiations are easier.

1.3.1.2. Ex-post renegotiations and ex-ante biased incentives

The effects linked to ex ante competition are confirmed by the fact that contracts are incomplete and thus difficult to enforce.⁴ Anticipating this, private firms might bid aggressively not only because of the winner's curse effect, but also because they anticipate they will be able to renegotiate ex post. If bidders believe that renegotiation is likely, their incentives and bids will probably be distorted and the auction might not select the most efficient provider, but rather the one most skilled at renegotiation. Renegotiation can thus reduce or eliminate the benefits of competitive bidding for public authorities.

At the same time, empirical approaches show that it is not always efficient for public authorities to commit themselves not to renegotiate the contract. Bajari and al (2009)

³ Recent developments highlight that even without any common-value dimension to auctions, but considering the possibility of bidders making prediction errors (*e.g.* because in some cases they might be overconfident about the signs they receive about their costs or evaluation of what is being auctioned), competition induces a selection bias in favor of optimistic bidders, even in the case of pure private value auctions (Compte 2004). The winner's curse phenomenon is thus not specific to common value setting.

⁴ If the institutional framework was flawless, such issues would not arise and contracts would be complete. As we reveal later on in this paper, the nature of the institutional framework plays a key role in reducing or enhancing every limit pointed out in this section.

examined a comprehensive dataset of private sector building contracts awarded in Northern California between 1995 and 2000. They highlight the need for bilateral negotiations for complex transactions. They confirm that auctions may perform poorly when projects are complex, contractual design is incomplete and there are few available bidders. Furthermore, auctions may stifle communication between buyers and sellers, preventing the buyer from utilizing the contractor's expertise when planning the project. Data show that negotiation is then preferred to auction. In the same spirit, the "Competitive Dialogue" promoted in Europe to combine communication with competition avoids a binary choice between negotiation and competition such as the one analyzed by those authors, and permits a kind of continuum between pure auction and pure bilateral negotiations, taking into consideration the fact that ex post enforcement of the initial contract is not guaranteed.

More generally, efficiency considerations push public authorities to be open to ex-post renegotiations. Often PPP agreements are output-based (i.e. the government specifies basic capacity and quality standards) and let the private operator choose how to meet the output specified.⁵ At the same time, because of the high level of specific investments, these agreements run for a very long-term; typically 25-30 years. The provisions set out in the initial contract are therefore likely to be obsolete during the life of the contract. Flexibility and adaptation are therefore important, probably more so than in most procurement relationships. When the original output description become obsolete, the contractual agreement might be modified by mutual consent. Flexibility may then be achieved through well designed "change the mechanism-clauses" that regulate the possibility of renegotiation of contract provisions when such adaptation is allowed (e.g. in France, renegotiation of PPPs is regulated).

However contract renegotiations typically occur in a bilateral "lock-in" situation rather than a multilateral competitive one, unlike the original process of awarding and contract drafting. The risk is twofold: the contractor can exploit its now strong bargaining position or the government can expropriate the contractor of its past investment. These risks increase because of strategic behaviors by private firms anticipating ex post renegotiation (Guash 2004, Guash-Laffont-Straub 2008) or by public authorities (Engel & al 2008). Thus both when renegotiation occurs and when the contract is rigid, a PPP might deal inefficiently with uncertainty about future demand (Athias and Saussier 2008).

Ex-post, public authorities face switching costs in changing suppliers that induce it to stick with an inefficient operator to whom it awarded a franchise. If a public authority swaps suppliers, it could face political embarrassment and service interruption, reduce incentives for private parties to invest (fearing early contract termination), and the need to organize a new (costly) auction (Williamson 1976). On the flip side, switching costs gives firms the incentive to renegotiate contracts to obtain higher prices, misrepresent costs, and provide low quality services (to the extent that this behavior is not monitored and/or quality is not perfectly contractual).

From the private operator's point of view, a public authority might well capture investments in infrastructures. The only limit is the actual ability of the firm to rely on the rule of law and on the political power of its national government (in the case of overseas investments) to obtain compensation for the potential "nationalization" of part

⁵ Sometimes contracts are simultaneously input and output based (Guash 2004).

of its capital.⁶ Thus when the rule of law applies, ex-post renegotiation tends to be biased in favor of the private operator facing lower hazards of opportunism by the government than vice versa.

To avoid this, public and private parties could attempt to write a “complete” contingent contract from the outset, or establish a review process to periodically evaluate and change prices (Masten-Crocker 1991, Crocker-Reynolds 1993, Saussier 2000, Athias-Saussier, 2008; Bajari-McMillan-Tadelis, 2009). However either approach results in institutions and procedures converging towards the very regulation they were designed to avoid.

There is very little information about the frequency of contractual renegotiations in contracts signed with governments. Nevertheless the few empirical studies that do exist suggest this issue is crucial. Hence Guasch (2004), in a study of more than 1,000 concession contracts in less developed countries, found that more than 50% of them were renegotiated (not always at the initiative of private firms) on average three years after being signed. Such facts suggest that the willingness of those contracts to organize a bidding process might be misplaced (Bajari & al 2009). Another smaller study of 73 worldwide infrastructure concession contracts (Athias-Saussier 2008) also found high renegotiation rates that suggest this issue is not restricted to less developed countries.

Nevertheless very little is revealed in these studies about the results of renegotiations. More precisely, it is hard to conclude that renegotiations are bad without knowing if they arise because of strategic behaviors or because of the need to adapt to the environment. To our knowledge, all existing studies suggest that renegotiation rates are an efficiency indicator (i.e. the more the renegotiation, the less efficient the contract). This is not obvious and needs to be further qualified. Value created by a contract readjustment might overcome renegotiation costs and/or default of incentives (to invest and efficiently manage the service).

This credibility issue gives rise to new theoretical questions. More precisely, one might think of organizational solutions to reduce the risk of opportunistic renegotiation. Hence Desrieux and al (2008), studying the choice made by 5,000 local authorities in France concerning their water contracts, showed that one way to reduce opportunistic behaviours by a private operator might be to propose a bundle of contracts for different transactions to the same private operator in order to threaten it with collective retaliation in the case of opportunism in one contract (similar in vein to the idea of relational investments to help safeguard transactions in private firm-private firm exchange in transaction cost economics).⁷ Also Beuve and Desrieux (2009) suggest that the threat of impacting the private operator’s reputation and/or tightening up (or slackening off) contractual constraints when renegotiation occurs are also means of limiting the opportunism of private firms. Such studies highlight the fact that contracts with governments can only be fully understood if the relational dimension of these

6 It is important to note that since the brutal “nationalization” of the 1970’s, most government procedures for capturing assets (domestic or non-domestic) from firms is no longer based on the nationalization process of transferring property rights to the government or public agencies. Most of the time, it is a soft process by which the government (and/or the parliament) mitigate the property rights of asset holders by reducing their right of exclusion, their freedom of pricing, etc.

7 In the same spirit, Plunket and Saussier (2009), using the same data and performing spatial econometrics, suggest that the geographic localization of contracts plays a role in the way renegotiations occur.

contracts is taken into account during analysis (Gibbons 2005), as well as government's ability monitor such contracting issues.

1.3.2. Contract renewal issues

At the contract renewal stage, the winner of the original competition has an advantage due to the "fundamental transformation" that gives the winner specific advantages over other potential bidders. Furthermore, the winner is best informed with regard to quality and the amount of future investments needed to operate the service. Hence in France, more than 90% of renewed contracts with the government for water and local transportation are renewed with the same private partner, suggesting it might be difficult to organize competition for the field more than once.

A good example of this problem is the drinking water supply contract from Syndicat des Eaux d'Ile de France, or Sedif, the regional water administrator for the greater metropolitan area of Paris. The contract with Sedif is worth around EUR 350 million a year, is the biggest water contract in Europe and has been operated by French water, waste and energy group Veolia Environnement since 1923. It is up for renewal at the end of 2010. Because Veolia is clearly in a good position to be renewed (i.e. the fundamental transformation has occurred), Suez Environnement Chief Executive Jean-Louis Chaussade told a press conference that his company has proposed dividing the water services contract between several bidders because such a split would be the best way to ensure competition between several operators.⁸ In fact it appears to be the only way for Veolia's competitor to win a part of the deal. At the same time, such a split of the Sedif contract could simply replace lack of competition by risks of collusion.

1.4. Lessons for private operator strategies

It is vital to point out that there is very little analysis of the best competitive strategies to be used by private firms in their relationships with governments. Most of the existing literature is based on the viewpoint of the general public or of a (benevolent) government seeking to maximize public interest when attempting to provide public services through a private operator. This literature can, however, be interpreted from the point of view of these private operators, at least to better understand the strategic constraints they face when dealing with a government.

The theoretical and empirical studies converge to point out three "stylized facts". First, contracts with governments tend to be awarded for an extended period, with a high probability of renewal, because of the specific investments needed and the learning effects. Second, the government tends to be open to renegotiating the contract because of the high switching costs and its awareness of the need to adapt. Third, it is extremely difficult to disentangle requests for changes linked to efficient adaptation from those due to opportunistic behavior, because each project is different and because of the interdependencies between investments and constraints in terms of exploitation. Thus on the one hand, this suggests that potential private operators should have strong incentives to aggressively bid when new competition for the field opens up, since at the end of the day the contract will be easily renegotiable with the government. Aggressive strategies may even include corruption. Since probability of renewal is high, it is desirable to be selected, and all competitors will have a strong incentive to rely on legal

⁸See the Morningstar, November 25, 2008 article: http://news.morningstar.com/newsnet/ViewNews.aspx?article=/DJ/200811251207DOWJONESDJONLINE000456_univ.xml

and non-legal means to be awarded the market. We will return to corruption issues in the second part of this paper.

On the other hand, governments anticipate their ex-post lock-in and may reply to it by developing a relational partnership aimed at aligning the interests of both parties. First the government can award different types of services to the same operator. As advocated by Desrieux and al. (2008), since the various services have different characteristics in terms of level of investment, observability, frequency of renegotiation, etc, the government can rely on some contracts to retaliate in the case of opportunistic behavior by others. More generally the multiplication of links, while increasing mutual dependence and therefore switching costs, also increases convergence of interests. For instance, the sensitivity of the voting behaviours of citizens to the quality of the privately operated public services increases with the number of services operated by the same operator, who is increasingly considered a partner of the public authority. This should reduce the incentives of the private operator to behave opportunistically. On a more positive note, private operators should understand that while ex-ante (before the award) the dominant strategy is to be opportunist to win the market, ex-post, the best strategy to secure the de facto rent in the long run is to cooperate with the government and split potential efficiency gains between the company owners and customers. Indeed attempting to harvest all the rent in the short run might well result in retaliation by the government (both acting as an individual or because of public pressure). Being cooperative ex-post is, on the contrary, the best way to increase the chances of winning extra markets. This is clearly illustrated by the French case where most local public services are operated by three “giant” contractors benefitting from high rents but also providing good quality services at reasonable prices (compared to international standards).

At the same time, the bargaining position of private firms is strong if, and only if, the rule of law applies, and if politicians cannot capture private operators without fearing legal or political retaliation. From this point of view, the “rules of the game” seem quite different between developed countries and the rest of the world. More generally, all that has been said up to now should be qualified by taking into consideration the institutional context and true nature of the government, which is not an actor but a complex organization subject to various interests and collective dynamics.

2. Contracting with a sovereign... subject to various interests

Up to this point we have considered the “government” a maximizing agent like any agent (either an individual or private firm). However the government is a special party in a contract because it is not an agent but rather an organization (i.e. the State) with a large number of heterogeneous and partly conflicting interests. The latter bargain and sometimes fight to influence the behavior of the entity that is the “public party” in the “public-private” contract. This entity might therefore behave inconsistently in the long term and may even demonstrate inherent contradictions in the short term. This is of course essential when analyzing and attempting to understand contracting with a government.

The specific nature of the “sovereign” as contracting party can be analyzed from two angles. First, one can consider the government as a homogeneous actor — let us say a legal entity — subject to various interests. The viewpoint here is the political economy

to which the government is subject: those of voters, but also those of politicians and bureaucrats. And also those of organized interest groups such as businesses, unions, etc. These are described in detail in de Figueiredo's chapter. This leads to analyzing the credibility of government commitments and the processes of capturing political decision-making by individuals and groups within the government (Section 2.1). Given the hazards of these attempts to capture public decision in favor of private interests, legal and constitutional guarantees are generally established (in most developed countries) to reduce the feasibility of private capture. The nature and efficiency of these institutional responses also need to be understood (Section 2.2). However the government can also be considered an entity not only subject to "external" influences. Governments/States are complex organizations that are internally divided. Here the viewpoint is the constitutional political economy crossed with the economics of organizations. To efficiently reach its goal — to define the general interest and provide public goods — the government is horizontally and vertically decentralized, resulting in the need to contract with a set of entities with partly conflicting preferences and contrasted rights to contract (Section 3.3).

2.1. The State as the meeting of conflicting interests

Whereas the State can be a tool in the hands of a small elite used to control the masses, it can also be analyzed as a guarantor of a social contract between the various stakeholders in the society, as is done, for instance, by the contractual approach to constitutions (e.g. Buchanan, 1977). In the latter spirit, members of the society accept coercion in exchange for the provision of public goods (starting with civil peace). The organization resulting from this social contract is the State, which becomes responsible for defining the general interests — which are hard to establish because of the non-aggregativity of individual preferences and because of the low incentives to reveal preferences — and also has to implement it. One of the public goods provided by the State is last resort enforcement because its coercion capability is the strongest in the society. For this reason, when it contracts with a private party, the State is both "judge and party". It is the last resort enforcer of its contracts, which induces a credibility issue (2.1.1). Moreover in democratic regimes, the government is sensitive to electoral pressures, which might lead it to consider contractual commitments as less important than voters' opinion (2.1.2). Lastly, politicians and bureaucrats are responsible for making choices that should reflect the general interest. However given costs of monitoring by citizens, they benefit from an organizational slack that may allow them not to implement the most efficient contractual solution when outsourcing services of general interest (2.1.3).

2.1.1 Contracting with a Sovereign

The problems raised by contracting with one party responsible for last resort enforcement has been explored early on in economic literature on contractual commitments. This is known as the "renegotiation vs. incentives (or revelation) dilemma". When a government wants to incite a contractor to maximize efficiency or to lead a contractor to reveal its information, the incentive theory states that it can implement an incentive/revelation scheme to lead the agent to behave as wished by the government. In a one shot, game situation, i.e. when there is no perspective of contract renewal, and when it is fully impossible to renegotiate the complete contract agreed upon — this goal is achieved by letting the contractor/agent benefit from an information rent. For instance a government with imperfect information about the actual costs of a

service, who wants to incite an operator to reduce these costs, can propose a price cap contract. This is based on its assessment of the level of costs and on the perspective of cost evolution if the operator rationalizes the infrastructure. The price cap results from a mark-up applied to the estimated costs and their evolution. In the absence of renegotiation and renewal, the operator is encouraged to minimize costs because the contract does not regulate its profit but its price. Any productivity gain superior to that estimated by the government in the contract increases its profit. The “information rent” is the difference between the mark-up ex-ante granted by the government and the actual profit margin. The firm is encouraged to reduce costs because it is the residual claimant of its efforts. Moreover it is led to “reveal” information about its true costs since its level of sales and benefits are observable (at least by the public authority). Thus ex-post, the government (and possibly by the general public) knows the true costs under optimal effort, and even the trend in productivity gains. The government is no longer under-informed and is strongly incited to capture the producer’s information rent. If we are in a repeated game, either because the contract is renewable or because the government can renegotiate the contract, then in the first period the operator will anticipate that the government will be willing to capture its informational rent ex-post. Unless the government can credibly commit itself not to renegotiate, the firm is no longer incited to make efforts and reveal information. If it succeeds in reducing its costs, it is incited to hide its productivity gains, for instance by providing benefits in kind to managers. In any case, the social benefits of the incentive scheme are lost and the truth about costs remains hidden (which means a deadweight loss since this information cannot be used to negotiate a better contract in the future; or cannot be used again as a benchmark to better manage the whole delegation contract. Hence the dilemma from the government’s perspective: either it tries to capture back the operator’s information rent and obtains neither cost cutting efforts nor revelations (or only reduced efforts and partial revelations depending on the operator’s preference for the present or it commits not to capture and obtains efforts and revelation, but the latter do not benefit society. The resulting rent is captured by the private firm (except for the value of the revealed information about actual costs and the capabilities of the private operator).

The incentive theory (e.g. Laffont and Martimort, 2001) raises the point that because the government is the sovereign, its commitment not to renegotiate bears little credibility from the contractor’s point of view. Legal protection may exist, but the government can always change the law, even when it is part of the constitution. This of course depends on judicial independence; in particular the independence of the highest jurisdiction. In most countries in the world — including democracies such as France — constitutional laws are not so binding as long as they are dealing with the property rights of corporations. Second, retaliatory capabilities of private firms are much weaker than those of governments. For instance it is difficult for private firm to adversely impact on the reputations of governments. If a domestic firm, it depends on the government on many issues, which leads moderate criticism in case of opportunism. If a foreign firm, it is also difficult to harm the government’s reputation. In addition criticism by foreign entities may in fact increase the popularity of the government. Third, as pointed out by Spiller (2008), renegotiation is often more de-facto than de-jure. The government does not try to formally renegotiate the contract. It can however pass laws or enact regulations that mitigate the rights of the contractor. For instance it can be taxed, forced to reduce its tariffs de facto or be led to face higher costs (minimum wage increase, new operating constraints, etc).

Hence the failure of governments to honor the terms of concession contracts seems to be a pervasive phenomenon. In Latin America and Caribbean countries, it is common for a new administration to decide not to honor rate increases stated in the concession contract granted by its predecessor (Guash, Laffont and Straub 2008). Examples include the Limeira water concession in Brazil, which was denied a tariff adjustment included in a contract signed by a previous administration. There are also cases where legislation was passed to nullify contractual clauses. Hence the Buenos Aires water concession indexed local currency denominated tariffs to the US dollar to protect the contractor against currency risk. However after devaluation of the local currency, Congress passed an economic emergency law that nullified these guarantees (Lobina and Hall, 2003). Governments may also issue legislation to render a particular type of contract illegal, even a contract it may have originally designed. Such use of governmental powers may seem extreme but are not unusual, as revealed by Spiller 2008 in the case of Venezuela's Decree No. 5.200/2007,12, requiring "that PDVSA, the Venezuelan public oil company, take operational control over oil projects in Venezuela, cancel all exploration, commercialization and production rights of the private/public association agreements originally set up between PDVSA and private oil companies (where private investors were the majority shareholders) to explore and develop those oil fields, and transfer those rights to mixed companies controlled by PDVSA. This Decree, known as the Nationalization Decree, came after private oil companies invested, by all accounts, billions of US dollars in developing these fields" (Spiller 2008, page 6-7).

In fact the only way for a sovereign to credibly tie up its hands is to implement legal and organizational constraints that reduce its ability to directly or indirectly renegotiate the contract. We will dig deeper into the solutions implemented by the public party to try to ensure its credibility; a necessary condition for the satisfactory performance of a contract and the new constraints they generate (Sections 22 and 23). But we would like first to further analyze the reasons why it is hard for a public contractor to credibly commit, especially in the long run (Sections 2.1.2 and 2.1.3). From a private contractor's perspective, this is essential to understanding this complex game because, on the one hand, the following developments explain the logic of the many constraints implemented in PPP processes and their limitations in guaranteeing the reliability of the public party; and on the other hand, it suggests some of the strategies needed to deal with these constraints.

2.1.2. Contractual commitment and democratic pressures

One of the problems raised by the public nature of a PPP can be better understood by taking a simple, game-like approach to the relationship. When the government negotiates and manages a contractual relationship with a private operator it is subject to two types of influence. First the citizens that benefit from the service (and eventually suffer from failures in its provision) and bear its cost (either through tax or tariffs) can pressure the decision makers since, as voters, they arbitrate between the incumbent politicians and their political competitors. Second the political competitors can rely on the unsatisfactory performance of the contract — dissatisfaction that can be related to different aspects: contract mismanagement, default of service quality, level of the operator's rent, unfairness in awarding of the contract, etc, to put pressure on the government. The game between the citizens, the political competitors and the incumbent politicians result in governmental opportunism. Those in power must choose between contracting and political credibility, with the latter coming as a first order constraint. Spiller (2008) details several cases of governmental opportunism:

nationalization, termination of contracts by local authorities, change of tariffs by a (non-independent) regulator, etc.

Using a sample of 307 water and transport projects in five Latin American countries between 1989 and 2000, Guash, Laffont and Straub (2008) found that 79% of the total government-led renegotiations occurred after the first election during the life of the project. In many cases, during the re-election campaign, the central or local government decided unilaterally in fashion to cut tariffs or not to honor agreed tariff increases to secure popular support. Political risk has also played a crucial role in Central and Eastern Europe. As reported by Brench, Beckers, Heinrich, and von Hirschhausen, (2005), a major obstacle to the PPP policy in Hungary is the frequent change in political attitudes towards PPPs and user tolls. Since 1990, each change in government had resulted in a different attitude and a transformation in the institutional framework for PPPs.

This result is true both in democratic and non-democratic regimes. It is obvious that in democracies, both the public and opponents scrutinize PPPs. Thus if a too-large rent is awarded to a private operator, it becomes difficult for the public decision makers to prevent themselves from renegotiating. In authoritarian regimes, the government is a priori more independent from public opinion and opponents. However such regimes also have a high level of capture by the elite and strong social inequalities, which, combined with the absence of organized political competition and contestation, result in a propensity to violence. To reduce the probability of a coup, revolution and riots, the government may renegotiate if rents are too high or service quality too low. Do and Campante, (2008), have, for instance, documented that the quality of public services is higher in (non-democratic) countries where the government is close to the masses and therefore more likely to become a victim of civil insurrection, providing evidence of this citizen pressure even in the absence of democracy. Of course in the case of a coup or revolution, "new entrants" have strong incentives to renegotiate past contracts since the political benefits tend to be high, while the costs in terms of credibility could be low (since they can argue that a "new era" is starting). The political economy of a non democratic regime is explored in further detail in Bueno de Mesquita and al. (2003), Acemoglu and Robinson (2000, (2005) and Besley and Masayuki (2007) in particular.

Thus under most political regimes, public and political opponents' pressures are likely to result in the inability to implement a high-incentive and transparent contract. On the contrary, the government will have trouble selecting a reliable private partner and may be led to pay substantial upfront rents to convince the most efficient operator to take the contracts, despite the potential hazards (Spiller-Savedoff 1999). Of course this is the rational, short-term, first best response by private operators to the government's difficulty in committing itself. At the same time, either selecting an inefficient operator or granting an efficient one with rents increases the probability of ex-post renegotiation.

The private operator thus faces a dilemma comparable to that faced by the government. On the one hand, it is incited to be opportunist and negotiate upfront rents (once awarded the contract). On the other hand, it could also employ a more long term strategy by providing a good quality service at a reasonable price, both to deter competitors from aggressively lobbying and bidding against him, and to forestall the criticism that might call for the renegotiation of their contract. Indeed developing cooperative strategies with the public authorities (and the public) might be the best response in the long run to the low credibility of the political decision maker. The private operator becomes a neutral service provider in the political game. This strategy

is obviously difficult to develop since incumbent politicians may then be led to request a higher quality/cost ratio by the private provider in order to politically benefit from it. This drives us to the potential bargaining between public decision makers and their private counterparts.

2.1.3. Politicians and Bureaucrats... and the general interest

Since the general interest is not the result of the automatic aggregation of individual preferences (and since there are information costs), there is always a state machinery to translate needs for public goods into actual technical and commercial specifications. Those in charge of this “translation” benefit from maneuver margins for two reasons. First, at the stage of translating general preferences for public services into actual projects, they must establish priorities — such as localization of an infrastructure — and therefore decide to privilege certain preferences over others. This prioritization cannot follow a rule that would be accepted by all in all circumstances. It is therefore largely a subjective choice. Second, at the stage of the implementation of a project and its translation into technical and commercial specifications, and in the specific case into contractual terms and conditions, those in charge of the implementation benefit from some slack due to their information and cognitive advantages over those who would have interest in overseeing their activity. Hence the issue of corruption due to the capability of some players — especially politicians at the first stage, and bureaucrats at the second — to influence the design of the project and the enforcement of the PPP. Indeed the so-called “grand corruption” of politicians (see the chapter by de Figueiredo in this book) aims in particular at choosing the projects to be realized and their general design. Favoring such or such option can influence ex-post the choice of the private provider and can also lead to options that will meet their interests. The front-line corruption of bureaucrats plays at a later stage, especially when it is a question of organizing the call for tender and supervising compliance with contractual obligations.

Whether a question of grand or front-line corruption, it must be pointed out that there are strong incentives on both sides to offer and accept bribes. From the point of view of the private party, bribing bureaucrats and politicians is a way of overcoming the uncertainties and the hazards inherent to PPPs. Ex-ante, at the selection and design stages, this is a way of avoiding being led to accept contractual conditions that would be unsustainable ex-post. Ex post, it is a way of softly renegotiating, enabling adaptation without too high capture. Of course the actual costs and risks of bribing pretty much depend on the quality of the institutional environment and the harshness of the political competition. From the viewpoint of the politicians and bureaucrats, and beyond the obvious attraction of private benefits derived from bribes — which may be significant because of the size of many of the markets in question — bribery is a way of entering into (or a consequence of) a cooperative relationship with the private operator. Given the need for flexibility inherent to very long term contracts, corruption can be understood as a component of a deal allowing “mutual understanding” by both parties of the constraint of the other. There might therefore exist an “optimal level of corruption” that would minimize transaction costs if an institution framework is malfunctioning.

The problem is obviously the fuzzy frontier between what is “efficiency enhancing” cooperation and private capture of the public interest and the authority delegated by the citizens. The higher managerial slack by bureaucrats and policy makers, the higher the risk of abuse of power against both efficiency and the collective interest. In most countries, therefore, formal and rigid procedures are implemented to bind the

discretionary power of politicians and bureaucrats. The costs of such procedures are, however, high in terms of default of adaption of the contractual commitments to the local specificities of the production and distribution of the good to be delivered. It may also hinder capability of adaptation to external conditions. Also, both the public agents and the private decision makers have a common interest in attempting to (partly) bypass the resulting constraints by shielding contracts from oversight by increasing their degree of “specificity” (to avoid competition and benchmarking). This points out the difficulties in actually controlling corruption given the size of the stakes and given the convergence of interests between firms and the public agents controlling/dealing with them.

When it comes to the organization of public services through public-private partnerships, corruptive behavior has been widely studied, especially in less developed countries (see for example Engel *et al.* 2006 and Guasch 2004 for empirical findings). But developed countries are not spared. The 2008 corruption perception index⁹ published by Transparency International points out the disparity among countries. France ranks 23rd in the world with a corruption index of 6.9 out of 10, while other European countries rank even lower. For instance, Poland, Greece and Italy rank 58th, 57th and 55th respectively, with corruption indexes of 4.6, 4.7 and 4.8. The United States rank 18th. This is confirmed by data collected by the World Bank measuring the control of corruption (Kaufmann *et al.* 2006).

Collusion that reflects another strategy to bypass legal procedures implemented to create incentives to convince the public operator to perform efficiently, is also present and difficult to control by the authorities in charge of awarding the PPP contracts. Few data and measures exist. Even so, several cases appear regularly and are condemned (See Albano *et al.* 2006 for empirical evidence on Europe). More problematic is the fact that, depending upon the way competition is organized and other exogenous parameters, collusion and corruption could go hand in hand, suggesting that when corruption of public entities exists, it may help sustain collusion strategies (Lambert-Mogiliansky and Sonin 2006).

2.2. Alternative “rules of the game”

As pointed out in the two previous sections, there is a dilemma in relationships between a government and its contractor. On the one hand it is necessary to avoid opportunistic renegotiation by the government to incite the private operator to invest efficiently and ensure productivity. On the other, it is also necessary to let the government to renegotiate to allow the private operator to optimally adapt to new conditions of production or demand. The solution to this dilemma can in no way be an iron rule like “never allow renegotiation” since such a rule is neither optimal nor enforceable given the specific nature of the enforcement context when the government is one of the contracting party. The only possibility is therefore to implement an adequate design of the institutional framework. Or to put it another way, the performance of the relationship between a private operator and a government pretty much depends on the design of the institutional framework in which the contract is implemented. We further discuss this issue by first pointing out how the institutional environment influences the type of contracts that make sense to be implemented between the government and the

⁹ <http://www.transparency.org>

private operator (2.2.1.). Then we go further by discussing the necessity of implementing specific rules for those contracts and to guarantee transparency (2.2.2)

2.2.1. The impact of weak vs. strong institutional frameworks on the design of contracts

The institutional environment might be analyzed as a way to complement incomplete agreements between private firms and governments. Depending on its characteristics, the institutional environment reduces or enhances difficulties already identified, especially renegotiation issues. The contract agreed upon by the parties will then be influenced by the institutional framework. Indeed if firms anticipate opportunistic behavior by the government¹⁰, because it is not able to commit not to renegotiate, they might underinvest and hide their information to protect future rents from the ratchet effect.¹¹ They may also ask for rigid contracts. Rigidity would then explain the high propensity to renegotiate. The inability of parties to adapt the contract to uncertain operating circumstances force them either to renegotiate or terminate.

Laffont (2005) analyzes the effect of a weak institutional framework, considering a situation in which firms do not know *ex ante* their type (*i.e.* whether they will be efficient or not) but only the probability of them being efficient *ex post*. In order to comply with the participation constraint, the government needs to guarantee a minimum profit based on the *ex ante* expectation of the firms. The latter might therefore bear an *ex post* negative profit, if it turns that they are inefficient. In this case, they may try to renegotiate their contract. If the institutional framework is strong enough to allow the government not to renegotiate and to enforce the contracts, then such a contract gives *ex-ante* the rights incentives to the firm. If, however, institutions are weak in the sense that they fail to guarantee the government will not have to renegotiate with a powerful contractor, it might better choose to sign low incentive contracts, like a cost plus contract, that provides with more certainty and lower the maneuver margins of the private operator (which has no incentives to underinvest).

Such conclusions are not far from Bajari & al (2009) arguing for negotiated contracts instead of auctioned rigid contracts for uncertain and complex transactions in the context of weak institutions. Indeed because public private partnerships entail long term contracting in uncertain and complex environments, the weaker the institutional environment, the less incentive oriented the contractual arrangement will be.

The table below sums up the literature on the efficient contract given the quality of the institutional environment and the hypothesis on the “rationality” of parties.

¹⁰On the flip side of weak institutions, renegotiations might arise from private firms’ opportunistic behavior as well. There are many examples where firms seem to behave opportunistically (See Guash 2004 and Engel & al 2006).

¹¹See Guash-Laffont and Straub 2008 for a model and propositions concerning government led renegotiations.

Rationality / Institutional Environment	Bounded	Perfect
Weak	Rigid Contracts (Spiller 08)	Low incentive contracts (Laffont 2002, Guash-Laffont-Straub 2008)
Strong	Flexible contracts (Bajari & al 09)	Complete contracts (Laffont-Martimort 2000)

2.2.2. Specific Rules

In practice, however, when it is question of dealing with a government in an institutional context, the “operational” variable is not the strength of the institutional framework in preventing renegotiation, but rather its actual design. Many dimensions are at play, and in particular the logic of the functioning of the public institutional framework (independence of the judiciary, accountability of the executive, etc.). This will be further discussed in the next section. But it is first important to consider how two dimensions of the “rules of the game” can be designed in order to try to benefit a better institutional environment by providing better stability to the two parties. We first discuss of the implementation of an ad-hoc regulation for PPPs, before studying the issue of transparency.

Should the relationship between a private operator and public authority be the object of a particular contractual regulation that takes into account their specificities? For instance in France, PPPs are administrative contracts meaning two things. First, they are *intuitu personae*: the public authority ultimately chooses the private firm it wants to cooperate with, whatever the result of the bid to grant the project. The aim here is to avoid the winner’s curse effect. Second, the public authority might decide unilaterally to change contract terms and the private operator must obey. A fair compensation must be given to the private firm. The limit to this ability to unilaterally renegotiate the contract is that changes should not change the value of the initial contract by more than 5% (otherwise the contract needs to be auctioned again). In contrast, PFI contracts in the UK are regulated like usual private contracts. It is clear that the discretionary behavior of the government is clearly higher in France than in the UK, and that the room for maneuver of the private operator is clearly different on the two shores of the Channel. In France, the initial contract is less negotiable and the government has more bargaining power ex-post. Moreover, the government has more freedom of choice once the contract is awarded and negotiated. At the same time, due to the quality and the independence of the French “administrative justice” (responsible for enforcing these administrative contracts), private operators are relatively well protected against abuse of authority; which might not be the case in countries relying on the same type of law, but lacking an efficient judiciary. Thus a specific regulation appears to be a solution to many of the issues identified in this paper, if and only if it relies on a well-designed, formal institutional framework supporting the design and the enforcement of the contract.

Another issue is the design of the institutional game to manage transparency. Indeed increased transparency should allow a better balance between flexibility and commitment. When transparency is ensured — both at the auctioning and the contract execution stages — inefficient renegotiation of the contract are less likely to occur (see Amaral and al 2009 for a case study). In addition, transparency can weaken risks of strategic litigation. It also decreases risks of political manipulation. So there is convergence of interests between private operators and the public to implement more

transparent procedures for awarding and overseeing the execution of PPPs. The logic is to avoid reducing face-to-face interaction between the collective and private interests to a bilateral non-visible negotiation between either a bureaucrat or a politician and private firm. Including stakeholders, either directly by involving them in the process, or indirectly by making it mandatory to inform them, is a good way of making clear the costs and benefits of the bilateral commitment between the mediators of the general interest and the private operator, as well as reducing individual capabilities of manipulation. Thus the implementation of disclosure rules and inclusion of stakeholder representatives in the committees responsible for the selection and oversight of PPP projects is essential. Furthermore transparency can include supervision of these highly technical problems by specialized state bodies to discuss technical solutions, certify budgeting and financial reporting etc.

In the same vein, the choice of three parties contracting (such as licensing) could be preferable to the logic of bilateral contracting (such as concessions); assuming that a license involves the contractor, the public “client” and a regulator, while often a specific regulator would not oversee a concession. Firstly it allows clarification of the double role of the state as “client” and “contract enforcer”. Secondly it enables the creation of a game that is more complex to manipulate, either by the private firm or government. Of course the actual impact of the implementation of a third party — the regulator — pretty much depends on its capability and independence, which bring us back to the question of the design and actual performance mode of the formal institutional framework.

Thus implementation of the rules of the game that meet the specificities and related contractual hazards of the relationships between a government and private operator appears to strongly depend on the design of the formal institutions characterizing a state. We will discuss this issue in the next and final section. Before, it is important to point out that while private firms have an interest in entering into a cooperative relationship with the public authorities to deal with the adaptability needs of long term, complex contracts, the possibility to do so depends on the quality of the institutional framework. In countries where the judiciary is weak and not independent, where the government is in the hands of a capturing elite backed by corrupted bureaucrats, where the civil society is weakly organized, where there is no powerful and independent intermediary levels of government etc — that is to say in countries corresponding to the notion of natural state as described by North, Wallis and Weingast (2006, 2009) — the only way for private firms to secure their investments and flexibly manage their contractual relationship with the government to ensure adaptation, is clearly to develop strategies aimed at influencing the government, parliament and more generally key individuals in the ruling elite (see the chapter by de Figueredo in this book). In contrast, in countries tending to develop “open access” institutions, the challenge is to contribute to strengthening these institutions. Corruption and influence are in any case both less useful and more risky. In these countries, then, the optimal strategy is to develop transparent cooperation with the public authorities, so as to be able to provide an efficient and adaptable service to the communities in question, and to rely on good faith and good reputation to secure investments in the long run. Indeed if the service delivered is of good quality and provided at a fair price, it is highly unlikely the contracts will be harshly renegotiated, non-renewed or terminated early. On the other hand, suggestions for adaptation are likely to be accepted because the private operator’s needs are understood, both by the public, the political challenger, the supervisor and the government.

2.3. The State as a complex organization

Too often the government is considered a unitary actor. As pointed out above, the relationship between a government and private operator can also be considered a relationship between two actors arbitrated by a third one, and influenced by external stakeholders. The point is that the government or state is not really an actor and that stakeholders are not external to it. The state is a complex organization made up of several interacting components and, in practice, a “contract” with the government is a set of contracts with several entities... and is, at least, a relationship influenced by a complex set of relationship within “the” government. This is due to two phenomena. First, the “horizontal” division of power results in interplay between the contractor (the executive), the judiciary and the regulator, with a specific role of the legislative that can change the rules of the game (2.3.1). Second, the “vertical” division of power, leads to multilevel governance, and therefore to contracting with several government (2.3.2).

2.3.1 The horizontal division of power

The division of power “à la Montesquieu” is the way of binding the government capability to manipulate its commitment. The cost is a potential inconsistency in the various branches of the government. For instance, the government and parliament can be dominated by different political parties, generating strategic games to hamper each other’s behavior. This can cause imperfect credibility. Also, the judiciary might be willing to affirm its independence by forbidding arrangements or renegotiations between the government and the contractor. The “game” between the different branches of the government is in fact quite different in different “regimes”.

This is true, first when contrasting “natural states” and “open access societies”. As pointed out in North et al. (2006, 2009) and Brousseau et al (2009), the latter are characterized by the rule of law, a sharp division of power, plus checks and balances. This considerably binds the capability of the government to behave opportunistically against private interest. Also public decisions tend to be stable through time since plenty of feedback loops forbid those in power from implementing dramatic changes. In contrast, the government’s commitments in a natural state are not guaranteed by any means. The relationship between a private regulator is a pure arm length relationship and can be only guaranteed by personal relationships with those in power or by credible threat delivered by the government of the private contractor’s home country (if this government is willing to protect its national businesses).

More interestingly perhaps is the comparison of countries whose constitutional regimes are roughly stable with those experiencing transition. Wherever they are on the “natural state” vs. “open access” axis (since one can imagine several hybrids between the two regimes; see Brousseau et al., 2009), stable countries can be characterized by foreseeable equilibria between the different branches of government. In natural states, the executive is clearly dominant and the relationship between the private operator and government clearly bilateral in the context of a weak institutional framework. As pointed out above, in a truly open access society, the discretionary ability of the government is narrow and public commitment tends to be credible. This ability to predict the behavior of the public party in a PPP, as well as assessing the reliability of the institutional framework, is clearly weaker in countries experiencing transition: either a major shift from an administrated economy to a market one, or a more modest change such as may occur during processes of “deregulation” of networks industries. In both cases, a competition for hierarchical position and independence is at play among the

different branches of the government. Conflicts with unpredictable outcomes (since relative positions are influenced by the dynamics of the conflicts and external shocks) can therefore be expected. This strong uncertainty makes it difficult for the private operator to adjust its relational strategy. At any moment its investments in cooperative relationships (either with those in power or with the legitimate representatives of the stakeholders) risk being undermined.

That said, two categories of actors are of particular importance for the private party. Their behavior must be scrutinized and understood, while it is doubtful that there are wide margins of maneuver to control or even significantly influence them.

First there should exist a clear delineation of the role of those in charge and those who supervise the relationship with the executive; i.e. the judiciary and regulator. In principle, the former ensures the security of property and contractual rights, which should lead it to analyze the compatibility of contractual commitment with the rights of the citizens and the competitors, and then to control the compliance and the renegotiation of the contract. The role of the regulator is rather to allow both ex-ante and ex-post mutual adjustment between the private operator and government. Its relationship with the judiciary thus matters greatly. Of course its independence from the executive is also essential. This independence has to be not only formal, but also actual. The actual budgetary strength of the regulator, as well as the dynamics of the careers of those working for the regulatory agency (if any) should therefore be taken into account to understand whether the regulator will be considered by the judiciary as really independent from the government and skilled enough to make decisions that meet the general interest; and will therefore not be systematically reversed by the courts. If this is the case, it can be then expected that the regulator will actually allow the flexibility required by the PPP, while avoiding capture by the government. Otherwise, the private operator has to understand whether a strong judiciary will suppress the government's ability to negotiate, or if the government is incapable of credible commitment.

Second, legislature can play a tricky role since it can impact the rights and status of the regulator; as well as those of the private contractor. The key here is to assess the quality of the constitutional guarantees that prevent the legislation from brutally impacting on both. The real authority and independence of the Supreme Court are essential here.

2.3.2 "Vertical" division of power

In practice, states are federal or decentralized and most of the time they have no fully clear delineation of authority among the levels of government and no full devolution/delegation of power between the tiers of government. As a consequence there is a frequent overlapping between different levels of government and their interplay in contractual relationships. For instance, major infrastructure is often built thanks to financial consortia that include several levels of government. Even grants among levels of government can lead one of the levels to interfere with the decision of the (most often infra) level formally in charge of managing the project.

In fact many of the PPP are developed within the frameworks of "meta-contracts" among levels of government. These contracts are the consequences both of overlapping competencies, and political reforms leading to the decentralization and federalization of the public authority in many countries (cf. Brousseau, 2007). These contracts far from clarify the relationships among the components of the government since they are established in a context where commitments are hardly credible and non-renegotiable.

While a contract does exist, any authority in charge of its enforcement can hardly really harm a party responsible for non-execution. The different levels of government are intangible, cannot be bankrupted, etc. Threats in the case of non-compliance are either extremely light or hardly implementable. Second, the contracting parties have little choice and most of the time limited bargaining power. A party that wishes to switch to an alternative partner because of the lack of agreement ex-ante or lack of compliance ex-post could hardly do so. In such context these meta-contracts among levels of government do not solve the problem of interacting authorities in a weak institutional framework.

Thus the contracts between a public principal and a private operator tend to be multiple, principal-single agent contracts. The economics of these contracts still need to be further defined, but one can easily anticipate difficulties in running them due to the possible collusion of some principals with others and with the agent, to the detriment of those parties outside these coalitions. This is at least what is predicted by the theory of the principal agents with delegation of supervision to one agent. These problems are exacerbated in the case of various levels of government since these levels play a strategic game to internalize the (political) benefits and externalize the (budgetary) costs of any PPP. This results in even weaker commitment and high transactions costs compared to what we have discussed in this paper.

2.4 Lessons for private operator strategies

The main lesson to be drawn from the previous analysis is that the public party is loosely reliable from the point of view of the private operator. Due to the long term horizon of PPPs, and to the many hazards that can impact on the behavior of public decision makers, in addition with the constraints on enforcement, the private operator can fear hold-up and should never consider the existing contractual commitments as strong safeguards. The written contract is at best the clarification of an equilibrium point in an on-going negotiation game. As soon as the “environmental” conditions that determined the equilibrium achieved at a point in time change, the equilibrium is likely to evolve.

The best strategic response to this intrinsic uncertainty is twofold. First the private operator should do its best to avoid being the ally of one stakeholder in the political game or a coalition. Its rents, if any, should be redistributed to the incumbents, the opponents and also the public (in the form of quality services and low prices). By “rent redistribution”, we are not necessarily speaking of bribes; while not excluding them. We are speaking of funding projects, delivering additional services, employing specific categories of individuals, etc. that might target a group or an organization. Whether legal or illegal, such policies for rent redistribution are, in fact, unavoidable because the only protection the private operator enjoys is the development of a relationship with those making decisions now and in the future. Developing relational strategy is the second general lesson to be drawn from our analysis. This is the best response to the lack of reliability of the enforcement framework. The relationship must become self-sustainable in that the two parties would have something to lose in case of breach. The private operator should therefore avoid being a free-rider and short termist. Instead he should develop a cooperative attitude with public authorities so as, for instance, to discuss of the way of sharing rents when they occur. It might, at first sight, be considered uselessly generous to reveal information to the public party. At the same time, in the case of

adversarial relations, the public party gains most of the bargaining power and it is always difficult to hide information in the long run.

These general statements must be qualified. First, the situation is slightly different when the public party is the central/federal government and when it is local or a municipality. Everything equal, there is more capability of third party enforcement when it is a question of more local governments. When the national government is the contractor, then the private operator is really contracting with a party that may exercise its sovereignty. Second, the question is obviously to check if the rule of law applies in the country in question. While the political game can always end up with the government not complying with its own past commitments, it is much more costly to do so in countries where the rule of law applies because there is an independent and skilled judiciary, because this is a social norm, because the division of power à la Montesquieu operates, etc. Thus in those countries, even if the formal contract is not a fully credible guarantee, the public party is less likely to behave opportunistically, and is more open to cooperative behavior. Predation is more frequent in countries characterized by a weak institutional frameworks and the only solution for private operators is to develop cooperative relationships with individuals, with the high risk, then, of being considered partisans in the political game.

These developments highlight the fact that the private operator should pay close attention to the specificities of governance for each level of government and for each country. Technical analysis of the project, economic assessment of the transaction and of the dynamics of the industry in question are not sufficient; and even in many cases they are considered of secondary importance compared to in-depth studies of the actual functioning of the government, of the public bureaucracy and of the administrative justice.

3. Conclusion

As pointed out in the introduction to this paper, there are still relatively few studies analysis of PPPs, especially from the perspective of the private operator. There is therefore an important need (and plenty of room) for developing applied approaches to current contractual practices and institutional framing of PPPs. From a theoretical perspective, the challenge is to integrate recent developments in Political Economy with the theory of contracts to obtain a better understanding of public party behavior and remedies to the lack of ability to contract efficiently.

Indeed analysis of contracting issues between private firms and the government cannot rely on the sole existing theoretical frameworks developed on the basis of analysis of contracting among private firms under the supervision of a powerful last resort enforcer (even if its capacities can be bounded). Up to this point, most of the literature focused on the specificity of the transaction and relied on the hypothesis of a benevolent public authority to describe these types of relationship. Progress in the understanding of the economics of PPPs — both in positive and normative approaches — should rely on a better understanding of the behavior of the public party in these contracts.

First its objective function should be better understood. Does it seek to maximize collective surplus, chance of re-election of the incumbent politicians, consumers' satisfaction, etc.? Such an analysis would imply a better understanding of the way the various stakeholders — and above all the taxpayers and users of the service — perceive

the game and play their strategies. It would also imply a subtle understanding of the processes of decision-making within the state. Who — the politician, public executives or front-line bureaucrats — decide what? How does the information circulate within the bureaucracy? How is the expertise organized and accumulated over time? What are the incentives of the various “players” involved in the contractual game with the private party? Here are some of the questions that should be investigated to explore one important issue: the extent to which an adequate design of the public decision making process would be a way of controlling the intrinsic weaknesses of the contractual guarantees in the specific case of contracts with government.

Second, the institutional dimensions that matter the most to establish checks and balance between the private operators and public contractors should also be investigated. In the real world there is no “strong” or “weak” institutional frameworks. There are alternative ways of organizing the division of power between the judiciary, the executive and parliament. Regulators are granted with differing levels of authority and capabilities, as well as different scopes. In law there are many differences in renegotiation regulation, liability rule and authorized contractual provisions. The same applies to the judiciary in terms of its organization, career management etc. All these elements actually impact on the enforcement conditions of the contract, and so should influence their design and performance. Theoretical developments and empirical investigations should obviously be developed to understand how the various hazards identified in this paper are tentatively dealt with in the real world, and whether this could be enhanced by innovation in contractual and/or institutional design.

Third, the logic of the repeated game should also be better understood and investigated. We already pointed out that the firm’s best response to the lack of commitment capability of the government is to develop a cooperative relationship. In a sense this is also in the interest of the government and the public. However at the same time, this can give rise to major drifts like corruption and collusion. More generally the actual costs and benefits of various degrees of cooperation between the various parties involved in these complex relationships, as well as the cost/benefits of the institutional patches implemented to prevent these cooperative behaviors (like public tender regulation), should be better understood.

All this opens the doors for a wide set of theoretical and applied research aimed at better understanding the functioning of states as organizations and of institutions. It is worth pointing out that the PPP is a promising field of research because in many countries, especially the more democratic ones, information on the contracts is publicized and traceable. So there is a huge opportunity for developing databases to grow comparative institutional studies of contracting with government in different legal, political, and institutional contexts.

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