

# **ARE PRISONS GOOD CANDIDATES FOR PUBLIC-PRIVATE AGREEMENTS? EVIDENCES FROM BRAZIL, FRANCE AND UNITED STATES.**

Sandro Cabral  
NPGA/PROGESP – Federal University of Bahia - Brazil  
ATOM – University of Paris I – Sorbonne

Stéphane Saussier  
ADIS – University of Paris 11 – Sud  
ATOM – University of Paris I – Sorbonne

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## **Abstract**

*Prisons are often taken as an example to illustrate theoretical models concerned with the proper scope of government. However, there are few empirical studies about the correctional sector. In order to fill this gap and to assess how empirical facts are connected to theoretical developments concerning Public-Private Partnerships (PPPs), we analyze some results of the private participation in prison services in three countries: Brazil, France and United States. We highlight different results in these countries. We argue that the explanation for those differences requires the understanding of the attributes of the supply of publicly services by private actors, such as: the incentives schemes; the allocation of property, revenue and decision rights to the operators; the degree of specific assets involved; and, finally the institutional environment. In the latter we include the informal institutions (rules of inmates and illicit arrangements), which are particularly important in the case of prisons. The theoretical literature studying PPP's usually analyzes those blocks separately. We argue that the main driving factors of efficient arrangements do not rely on one peculiar element but in the way those elements are combined, giving rise to a superior governance structure. According to that combination, prisons might or might not be good candidates for public-private agreements.*

Keywords: PPP, prisons, incentives, institutions

JEL: H11; L33; H41

## **1- Introduction**

In the last twenty years several governments throughout the world have been promoting reforms in order to increase the participation of the private sector in the provision of public services utilities (Estache 2006). Water (Shirley and Ménard, 2002; Saussier and Ménard, 2000; Chong & al, 2006), electricity (Glachant and Finon, 2003), infrastructures (Engel & al 2006) and telecommunications sectors (Levy and Spiller, 1996) have been analyzed. However, little is known about public and private governance of prisons.

Researchers seldom focus in their studies on the correctional sector, probably because the process of obtaining relevant information is not an easy task: not-consolidated data and confidentiality are reasons that disturb and frequently impede the execution of researches in the sector. In this way the issues related to the prisons performance remains a sort of “black-box” compared to other public services utilities.

Yet, on the other hand, prisons is often taken as an example in order to illustrate theoretical models concerned by the proper scope of government (See for example Hart-Shleifer-Vishny, 1997; Hart, 2003). Because such services imply several tasks that might be split between public and private authorities, that may differ depending of the kind of prisoners concerned. In addition, the management of prison services is quite complex due to the diversity of such tasks. In fact, besides to prevent escapes, riots, and so on, prison managers must to provide to prisoners: health, food, judicial and reinsertion services, which requires the coordination of different institutions and organizations. Of course, that interaction is no conflict free so that the frictions may arise and create inefficient arrangements.

In this paper, we have analyzed some partial results of the private participation in prison services in three countries: Brazil, France and United States in a public versus private perspective. This permits to partially fill this empirical gap and to assess how empirical facts are connected to theoretical developments concerning Public Private Partnerships (PPPs)<sup>1</sup>.

Interestingly, results are contrasted. While in Brazil we can see that public-private agreements lead to some cost reductions and an increase in the quality of services

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<sup>1</sup> In this paper, we refer to PPP the different modes of private participation (privatizations, concessions, outsourcing) in the provision of public utilities.

provided (Cabral and Azevedo, 2005), in France first empirical studies suggest an increase in both, cost and quality (Cour des Comptes, 2006). In between, in the US we observe cost and quality reductions (Bayer and Pozen, 2005). Those observations suggest that the proper scope of government is not only a question of characteristics of the transaction as would suggest a transaction cost analysis framework (Williamson, 1985), once that for the same transaction the private participation is more or less efficient.

More than the attributes of the transactions, several contractual and extra contractual dimensions may explain those results and are stressed by competing theoretical frameworks. The incentives schemes proposed by governments to reward the private operator in charge of the good or service provision is obviously a good candidate (Holmström and Milgrom, 1994; Bajari and Tadelis, 2001). The allocation of property, revenue and decision rights to the operators can impact on the results as well (Hart, 2003; Baker-Gibbons-Murphy, 2004). Finally, the institutional environment is also an important factor in PPP's outcomes once it shapes the choices and constrains the actions of the actors involved (Levy and Spiller, 1994, Guasch, 2004).

All those elements seem important in the case of prisons. However, in this specific case the informal institutions also matter – here we can include the rules established by the inmates themselves and the illicit arrangements between correctional officers and prisoners. In the correctional sector it is also hard to specify in the contract some critical factors like the use of the force by correctional officers (Hart, Sheilfer and Vishny, 1997). Therefore, probity concerns cannot be ignored when one talk about private management of prison services (Williamson, 1999).

Nevertheless, the theoretical literature focused on studying PPP's normally analyzes all those blocks separately. The effects of the interaction among them are seldom taken in account. We argue that the relationship among the attributes above mentioned on the outcomes of PPP's can not be ignored as it can explain the relative success of PPP's in Brazil compared to France and the United States.

We divide the paper as follows. Next section considers the way property rights might impact on efficiency. Incentives, property rights, transaction costs and institutional issues are also discussed as complementary elements. In the third section, we present the cases of PPP's in prisons in three different institutional contexts (Brazil, France and United States). The peculiarities of the sector and the main results obtained are showed. Fourth section discusses why the empirical results differ from one country to another and why the few existing empirical studies often remains inconclusive (Lukemeyer & McCorkle, 2006). We show that the main driving factors of the efficiency of the Brazilian case do not rely in one peculiar element – like property rights itself – but by the way elements like decision rights, revenue rights and property rights are combined and aligned, giving rise to a coherent governance structure. We argue that the effect of privatization is dependent of this proper alignment. This may explain why private participation in prison services lead to very different results from one place to another. Last section concludes. Besides to stimulate some theoretical discussions, the main findings of this work can be useful for policy makers when designing new public policies to correctional sector.

## **2- What governance structures for prisons?**

The development of Public-Private Partnerships (PPPs) is a recent phenomenon.<sup>2</sup> Under a scenario of fiscal constraints, PPP has been used by several governments in order to make possible the supply of services, which in the past were publicly provided. However, If PPP may have been seen as a perfect solution to avoid public and market failures (Demsetz 68) some doubts have been raised since concerning its efficiency (Williamson 1976). The question can be studied through several theoretical approaches that focus on different dimensions of PPPs.

Ten years ago Jonh Dilulio Jr. (Dilulio, 1996) has claimed for a more intensive participation from economists in criminal issues. By using quantitative and formal modeling, economists could shed new light on controversial themes and also answer methodologically complicated questions. In fact, there are not so many studies focusing the economic aspects of crime and correctional activities, but there are some meaningful works, which go beyond the limits of the theme and can provide significant contributions to a broader set of questions. Amongst them we can mention the seminal papers of Becker (1968) – related to a principal-agent model of crime and punishment; and Hart-Schleifer and Vishny (HSV), (1997) – focused in the public versus private dilemma in prisons.

### *2.1. Property rights*

One obvious important dimension to consider is the property rights distribution. One of the most prominent contributions for understanding the public versus private dilemma is the seminal paper of Hart, Schleifer and Vishny (1997), which focused on the comparison

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<sup>2</sup> The interest of researchers for PPPs and their development is a recent phenomenon. Nevertheless, PPPs exist for several hundreds years in France.

between public and private participation in the provision of prison services. The authors adopt an incomplete contract view, where the private operator's residual control rights would contribute to reduce costs at the expense of the quality of the provided services. In order to improve quality, the private operator must incur both the costs of quality provision and the costs of influencing the government to accept changes (the government must agree to pay for improvements through a Nash bargaining). Consequently, the private operators have incentives to under-provide quality compared to the first best situation, which is socially inefficient. In addition, the benefits of managerial improvements in some cases can be inferior to the costs of reducing quality. Therefore, public governance structure will be preferred when the adverse effects of cost reductions impact significantly on quality levels and also in the case there is limited room for quality innovations by private actors.<sup>3</sup>

Another concern about private management expressed in HSV (1997) work is related to the fact that it would be very difficult to delineate contractually some specific tasks, like the level of the use of force to be employed by the private operator and to contract precisely enough on the capabilities of the workers. For these reasons the authors are skeptical about privately run prisons, especially when high security prisons are concerned, because of the important adverse effect on quality when reduced costs strategies occur (e.g. under-skilled workers would lead to higher rates of escapes). On the contrary, the authors believe that privately run prisons fit more with low security facilities, where the managerial complexity is lower.

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<sup>3</sup> This is because even if there is an adverse effect on quality when reducing costs, incentives to innovate on quality are also higher under private management compared to public management. Thus, quality that is depending both on adverse effect and incentive to innovate to improve quality might be higher under private management even when adverse effect exist.

Hart (2003) complete the HSV picture by considering the question of bundling (i.e, one single contract for building and operating) in prisons when a PPP is concerned. He concluded that *unbundled* modes of contracting (two contracts: one for building and other for operating the prison) are suitable if the quality of the construction could be well-specified *ex-ante*. On the other side, PPP would be recommended if the quality of the service can be well defined. In this case, private companies would avoid reducing their building costs, once that could disturb the normal operation of the correctional facility in the future. Nevertheless, it is very difficult to precise the service requirements in the contract, thus the author concludes that services should be made under the unbundling regime.

Such approach then suggests two clear hypotheses. The first is concerned with when private management should be used. The second is concerned with what kind of contract that should be signed (bundling or unbundling).

## 2.2. Decision and Revenue Rights

Interestingly, recent theoretical developments highlight the fact that property rights can be thought like a bundle of decision and revenue rights that can be partly transferable through contractual agreements. The proprietary of an asset or the proprietary of the decision rights over it, has the right to decide what to do with the asset (since its actions are not forbidden by the rule of the contract or by the rule of the law). Such a perspective refreshes the theory of the firm, because « *Firms may be islands, and the boundaries of these islands sometimes shift (via changes in asset ownership), but a useful map of the industrial terrain must include the « dense network of (bridges) by which firms are inter-related* » (Baker-Gibbons-Murphy, 2004). This gives rise to more possible combinations

(not only property rights, but also decision rights might be finely tuned) leading to complex hybrid forms of organization (Ménard 2004).

For our purpose, what is interesting here is that if PPPs are clearly hybrid organizational choices (Ménard, 2004). Such hybrid choices may vary greatly from one form to another, depending on the way the contractual parties decide to share decision and revenue rights. Property rights are pushed to the background and the picture is completed by the way decision rights are split. Concessions for building and/or operating the assets, delegated operation and/or management, services outsourcing, all of them are possible different ways of private participation in public services provision. According to the contractual design observed – which vary from one region/country to another – it might be observed some changes in the level of decision rights assigned to private operators, in the structures of rewards and sanctions to be applied in case of inappropriate actions, in the limits for government intervention and so on<sup>4</sup>. Of course, those factors present a direct impact on the PPP's performance indicators and, as a consequence in the social welfare.

Those developments suggest then that the two clear hypotheses that might be found in the Hart et al (1997) and Hart (2003) models might be blurred by the way decision and revenue rights are attributed and affect parties' incentives.

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<sup>4</sup> In this line of spirit, Desrieux (2006), compares the PPP models adopted in France (public services delegation) and in Anglo-Saxonian countries (private management). She identified some differences between the two models. In the same vein of HSV (1997), she observed that the latter is preferred when there are weak effects on quality indicators from private companies' cost reduction efforts. If such efforts bring an intermediate level of adverse effects on quality the French mode is more efficient.



### 2.3. Institutions and complementarities

One way to go a step further would be to mix incentives resulting from the distribution of property rights and incentives resulting from decision and revenue rights (for example used payments schemes) in PPPs.<sup>5</sup>

Institutions have a leading role in the shaping of the incentives factors (information asymmetries, structures of rewards and punishments; and, mechanisms of credible commitment) in hybrid forms, like PPP. The contractual complexity normally observed in PPP contractual arrangements requires additional efforts for coordination. If property rights remain distinct disputes tend to arise making the roles of courts of particular significance (Ménard, 2000).

The correctional sector presents some characteristics – highlighted by the New Institutional Economics literature – which have a great impact on regulatory design and on public and private performance (Levy and Spiller, 1994). These include the presence of specific and non-deployable assets<sup>6</sup> and the elevated number of beneficiaries of having dangerous criminals behind bars – which may be superior to the region's electorate.

According to Shirley and Ménard (2002), four sets of institutions are relevant for public utilities: regulatory, judicial, political and external (like ONG's; religious movements, etc.). Particularly, in prison services we cannot ignore the role of informal institutions,

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<sup>5</sup> This view is not far from what is suggested by Holmström (1999). The author argues that the method of designing incentives inside the firm is connected to the repartition of ownership and other elements (like institutions). More precisely, incentive design can benefit greatly from the control of a wider range of instruments often accessed through the ownership of an asset. For this reason, incentives strategies and ownership of assets are connected. In fact, as he has recognized, *"The strength of the property rights view is that it articulates so clearly the role of market incentives and how they can be altered by shifts in asset ownership. But it says nothing about the incentives that can be created within firms. The real challenge is to understand how the two forms of organization complement each other as well as compete with each other as mechanisms for influencing individual incentives"* (p.76-77).

<sup>6</sup> In the same sense proposed by Williamson (1985), prisons are a good example of specific asset as they involve site, physical, human and dedicated specific assets.

*i.e.* the rules established by the inmates themselves and the society codes of behavior, which include the several modes of association among inmates, potential corruption of correctional agents, the relationships established between government officials and private contractors, and society's beliefs with regard to the treatment to be provided to condemned individuals. In addition, for contracts involving prison services the strong bilateral imposed by specific assets, might be a problem for private operators, mainly in regions where property rights are not properly assured by local institutions. As demonstrated by Guasch (2004) in such environments the risks of renegotiation are higher, which implies in the increasing of transaction costs.

### **3- Property rights and performances in Prisons? The case of three countries.**

Focusing on prisons and their alternative governance structures, there are few empirical studies comparing the performance obtained. One possible reason for such lack of interest can be related to the difficulty to obtain the necessary data for valid and robust tests. From one side, the data simply might not be available due to the absence of registering. It is rare the existence of systematic procedures for collecting the data concerned the prisons routines, such as: assaults among inmates or aggressions from correctional officers against prisoners. Sometimes, the own inmates can be constrained in reporting what really happens behind the bars in response to moral taboos – it is rare, for instance, that a person that was victim of raping talk about that with other people. Even when data exist, frequently they are poorly consolidated, which impede the execution of studies on a regular basis. There are also some cases where the information exists – even presenting some structural problems – but it is not made available by government bureaucrats. The explanation for the non-disclosure almost all the times relies on

confidentiality aspects. Thus, almost as a rule the “Pandora-box” remains unopened in several countries or regions. In this way, we must admit that economists and other social scientists have not strong incentives to investigate the prison related topics, like the public and private partnerships in the correctional activities.

Despite the difficulties above mentioned, in order to tackle this subject, we discuss some evidences of the private participation in prison services in Brazil, France and United States. There are some differences in the contractual arrangements between government and private companies in each country, which leads to different outcomes as can be seen herein after. Those results are measured in terms of performance indicators, and its definition can be seen herein below.

### *3.1 Performance indicators in prisons: Costs and quality dimensions*

Before comparing the outcomes obtained in the three experiences of three countries, we believe it is necessary to define the basis of comparison, i.e. what are the performance indicators that are taken into account. For that, it is important to set the prisons objectives in modern societies. We assume that prison plays some leading roles, such as: to protect the society from individuals that do not observe the formal rules; to punish criminals in order to discourage people from breaking the rule of the law, where the threat of constraining the freedom is a credible one; and most importantly, to provide the conditions that allow the inmate social reinsertion. Furthermore, human rights must be respected during throughout the period that the prisoner is incarcerated.

In order to accomplish those objectives, prisons managers need to manage both, cost and quality aspects. The first dimension is important due to the budgetary constraints governments have been experiencing in the recent years. In fact, cost reductions are one

of the main objectives of the new organizational arrangements in public services provision. In theory, the measurement of cost indicators is not complicated. Usually it involves the amount spent in the period with the custody of an inmate, which requires that some cost dimensions must be considered, such as: labor, material, energy, among other costs.

Quality oriented performance indicators must be aligned with the prison's goals above mentioned. In this way, it is essential that the correctional facility is able to provide proper services that can generate an internal environment, which preserves the physical and the moral integrity of inmates, employees and visitors, and also facilitates the process of recuperation of the criminal. Under that perspective, quality aspects can be grouped in three dimensions: a) recidivism rates; b) safety and order indicators (deaths, assaults, escapes, riots, etc); c) services offered to inmates (food, medical and legal assistance, rehabilitation services, etc).

Of course, the process of measuring those indicators may present some problems. Besides the procedural issues for collecting and consolidating the relevant information, some aspects are very subjective. In fact, it is hard to assess how good or how bad is the quality of the meal provided to inmates. Due to that reasons, we will set our sights to quality indicators that can be assessed through quantitative aspects. We begin with the US experience in the private participation in prison services.

### *3.2 Prisons privatization in United States.*

From the 80's some local governments in United States has found in the private sector an alternative to the increasing in the inmate population and the corresponding costs of operation and maintenance. The first experience of the private participation has taken

place in Tennessee in 1983. Nowadays, more than 30 states have adopted private solutions. There are roughly 264 privately operated correctional facilities. At the end of 2004 they were housing almost 100.000 inmates, which represents 6,6 % of the inmate population of the state and federal correctional systems. In some states like New Mexico around 42% of inmates are held on private facilities (US Department of Justice, 2005).<sup>7</sup>

There are few studies in United States focused on comparative aspects of public and private governance. However, in general they are driven to cost-benefit analysis. They are almost unanimous in concluding about the superiority of private governance in terms of cost-reductions (Archeoembeault and Deis 1996; Mitchell, 2003; Blustein and Cohen, 2003; Guppy, 2003; Bayer and Pozen, 2005).

The work of Archeoembeault and Deis (1996) is about three similar prisons located in the state of Louisiana. Two of them were managed by private companies and the other by state government. In order to assure the validity of the conclusions the authors have utilized descriptive statistics tools. The authors conclude that private prisons present better performance in terms of cost reductions as compared to the publicly operated unit. On the other hand, public prison seemed more efficient to prevent escapes and to provide a broader range of treatment, recreation, social services and other services to inmates.

Blustein and Cohen (2003) have found that states that have some of their prisoners in privately owned or operated prisons experienced lower growth in the cost of housing their prisoners held on public prisons. The authors are not assertive in explaining if that fact is related to the competition generated or to the reduction of the investment levels

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<sup>7</sup> The incarceration rates in US are in the top of the ranking. At the end of 2004, there were 2,135 million people behind the bars. This number represents 724 inmates per each 100.000 inhabitants (U.S. DEPARTMENT OF JUSTICE, 2005). In Brazil this rate is 195 (BRASIL, 2006) and in France the incarceration rate is 96 inmates / 100.000 inhabitants (COUR DES COMPTES, 2006).

from the government side. By comparing the cost performance indicators in 46 states, Mitchell (2003) concludes for the superiority of private companies in terms of cost reductions. A similar conclusion was obtained by Guppy (2003).

A more robust econometrical test concerning the performance of for-profit (private companies) and non-profit (public management and NGO's) juvenile correctional facilities can be found in Bayer and Pozen (2005). Taking the state of Florida as reference the authors corroborate the findings of HSV (1997) by concluding that for-profit facilities leads to a statistically significant increase in recidivism at expense of cost reductions.<sup>8</sup> Thus, the short-run savings offered by for-profit over non-profit management are negated in the long run due to increased recidivism rates, once the weaknesses of for-profit in reducing recidivism are systematic. Given the many legal, ethical, political and ethical complications associated with profit-seeking correctional facilities, the authors conclude that it seems easy to recommend a movement away from for-profit facilities in Florida's juvenile justice system.

Lukemeyer and McCorkle (2006) in a extensive study covering 873 correctional facilities in US (762 state facilities, 93 federal prisons and 18 privately operated facilities) observed that even though as group private prisons were less likely to experience any violence, private prisons with violence exhibited the highest rates of violence. This suggests that among private prisons in US there may two groups: one group that is very effective in controlling violence and one that is much poorer. This result is not in line

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<sup>8</sup> It is rare to observe studies that take into account the effects of recidivism. Although recidivism is one of the key performance indicators in prisons management, it is very difficult to find data about it. Two factors can explain such constraints. First, the information might not be properly recorded. Second, even within the criminologists it is not an easy task to establish a consensus about what is a recidivist. For some people, an individual can be considered a recidivist if he/she is sent back to jail after committing a new crime. For others, a criminal can be labeled as a recidivist if he (she) commits a new crime before a certain period after his(her) release from the correctional facility.

with what could be expected looking back at the model of Hart et al (1997). Nevertheless, this conclusion must be viewed with caution, given the small number of private prisons in the sample.

The findings above shed some light on the debates concerning the public versus private debates in the correctional sector as it shows some facts that are not highlighted by the other studies and the advocates of private participation.<sup>9</sup> Considering the incentives structure and the types of contractual arrangements between private operators and public authorities, one might observe the trade-off between cost-reductions and quality deterioration in private provision of prison services in United States.

### *3.3 The delegation of non-core activities in the France correctional service.*

The foundations for the private participation in the French correctional services have been built in 1987, when the “*Programme 13.000*” has been announced. The original proposal was in the sense of adopting in France the US model, i.e., 13.000 new beds would be built and operated by private companies, in order to deal with the overcrowding in a moment of budget constrains.

However, after several discussions the original idea has changed and an intermediate solution has been found: the hybrid management (*gestion mixte*). The prisons were built by private actors contacted by the government, but the responsibility for maintaining; controlling and occasionally punishing the inmates into the correctional facilities remained in charge of civil servants.

Several services were originally delegated to private companies like hostelry (food, hygiene and cleaning services), medical assistance, reinsertion services and the

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<sup>9</sup> In fact, Guppy (2003) and Mitchell (2003) demonstrate in their assumptions and conclusions a bias toward private participation in correctional facilities. Their studies were published by think tanks, which promote free-market solutions with limited government activities.

exploitation of labor activities. Civil servants perform the activities of management (warden), external vigilance and some administrative duties (*greffe*). Correctional officers – responsible for performing routine duties within the prisons – are also civil servants. Thus, the private participation is very limited in France, as non-civil servant employees in prisons represent only around 20 % of staff (Lazerges, 1997).

The first prison under hybrid management has started in 1990. Additionally, there were built later another 4000 places – all of them hybrid. Nowadays there are 27 prisons of this type in France, housing 14505 from 58231 inmates in France, which represents roughly 25% of the total inmate population. In addition, the Ministry of Justice has been announced the planning for building 13.200 beds more, all of them under the hybrid management and/or PPP.

Surprisingly, there are almost no studies, which compare the relative performance of prisons under hybrid management and the facilities under traditional provision.<sup>10</sup> The only available source, is a recent report from French government (Cour des Comptes, 2006). Although the report is not extensive – as it does not concern all French prisons and thus does not provide data suitable for an econometric test – its main findings are useful to understand what is happening in the sector.

The prison services in the hybrid facilities are provided by three companies specialized in facilities management.<sup>11</sup> Despite the fact that the participation of private companies is not so extensive, it is possible to identify some positive effects. They were able to adapt in

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<sup>10</sup> Probably the main reason for this lack of studies is related to the difficulty to obtain data. We have tried during more than 6 months to get the information necessary for a comparative econometric test with the French Ministry of Justice. Besides the difficulties imposed by governments we have observed (through successive interviews with public representatives) that databases with the relevant information are not available.

<sup>11</sup> The companies are: GEPSA (SUEZ); SIGES (Sodehxo); and IDEX.



the prisons under their responsibility some techniques before utilized in other private clients. As a result, the private operator has presented superior performance standards in terms of assets maintenance, quality of the food provided to inmates (essential for cooling internal tensions), cleaning and health cares.<sup>12</sup> Regarding the exploitation of labor activities, the results obtained by private operators were not significantly different from those presented by the traditional public provision.

Although private operators present better quality performance indicators than entirely public-operated prisons, the hybrid managed prisons are roughly 15% more costly. The reasons for such disparities rely on three aspects: a) additional fiscal taxes; b) increased quality in response to more severe contractual obligations; c) profit margin of private operator. The French authorities were not able to identify the contribution of each topic above in the gap observed.

Thus, differently from US, we can observe in France that private provision of prison services leads to an increasing in both, cost and quality aspects.

### *3.4 The Brazilian experience: between the French and the US models.*

The third case we will present is the Brazilian case. With an inmate population of roughly 360.000 prisoners and an incarceration rate of 196 inmates per 100.000 inhabitants, the Brazilian correctional system is known for its riots, escapes, evidences of corruption and high recidivism rates. Furthermore, the increasing in the correctional population is also a problem.

In order to deal with such constrains, some local governments have decided to utilize private sector in the correctional activities. After innumerable discussions, Brazil has

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<sup>12</sup> Despite the superior results in the medical assistance aspects, this activity was re-assumed recently by the French government.

adopted a model where the government keeps the ultimate responsibility for inmate's custody, remaining in charge of the external security and the management of the facility (warden). Although inspired in the French experience, the Brazilian example is placed in somewhere between the U.S. experience – where full privatization is possible – and the French one – where few activities are delegated. Certain activities not delegated to private operators in France, can be outsourced in Brazil, such as internal vigilance (executed by correctional officers) and legal assistance to inmates. The first experience of outsourcing was in 1999. Nowadays, there are 17 correctional facilities operated by private companies in 6 different states. They house around 2% of the Brazilian inmate population.

In order to illustrate the situation in the country, Cabral and Azevedo (2005) have made a comparative case study between two facilities, one publicly managed and other outsourced to a private company (also a hybrid form), both located in the region. Although the facilities are similar in physical structure (same design), in terms of capacity (both were designed to host 268 prisoners) and concerning inmates' criminal profiles, it is possible to observe some differences.

In terms of costs, as compared to the outsourced prison, publicly managed prison employs 20% more people, reports absenteeism rates which are three times higher and pays salaries 60% superior to correctional officers (75% of the staff personnel). It also spent 3 times more in water and electricity than the private company. Therefore, publicly operated facility is less cost-effective, which is consistent with facts and the theories previously observed.

However, when we look to the services provided to inmates, which is a quality indicator, the results observed goes against the theoretical hypothesis of Hart et al (1997), as the hybrid form have presented superior results. Outsourced prison provided 10 times more medical assistance to inmates and 20 times more legal advisors. As a consequence legal advisors No escapes or escape attempts were recorded in the privately operated facility, whereas in the public there were 8 and 25 respectively. We can observe that the internal environment is less safe in the publicly operated facility, by checking the indicators of assaults against other inmates and against visitors and employees, which is 15 times higher.

Similar conclusions are obtained by Cabral (2006). Via an econometric study the author compares 8 publicly and privately operated prisons in the state of Paraná. The study concludes that outsourced prisons present lower costs (10% less) and superior quality indicators (less escapes, deaths and superior number of medical appointments).

Thus, contrasting with the two other cases, the Brazilian case suggests that the private participation might lead to lower costs and superior quality performance indicators.

#### **4- Incentives and property rights: what alignment for what performance?**

In the last section we observed some differences in the behavior of private companies when providing prison services in different institutional settings. We argue that the reasons for superior or inferior performance standards does not rely on particular aspect, but is related to the combination of several elements, which together can lead to a superior governance structure. From this perspective, the incomplete contract theory (Hart & al 97) only gives a narrow picture of what is going on.

The table herein after summarizes the main characteristics discussed above of the private participation in prison services in each country. The aggregated information can be useful to our analysis.

Table 1: Effects of participation of private actors in prison services

| <b>Country</b>   | <b>USA</b>     | <b>Brazil</b>                  | <b>France</b>   |
|--|----------------|--------------------------------|---|
| Beginning of private participation                             | 1983           | 1999                           | 1990  |
| Number of facilities under private operation and/or management | 264            | 17                             | 27  |
| % of inmates in privately operated facilities                  | 6,6 %          | 2%                             | 25%   |
| Mode of participation  | Privatization  | Services Outsourcing           | Services Outsourcing  |
| Activities kept with the government                            | None           | Warden and external vigilance. | Warden, External and internal security, administrative controls, judicial assistance and health care. |
| Private companies decision rights level                        | High           | Medium                         | Low   |
| Costs effects  | Decreasing (-) | Decreasing (-)                 | Increasing (+)  |
| Quality effects  | Decreasing (-) | Increasing (+)                 | Increasing (+)  |

*Source: Elaborated by the authors*

After analyzing the table above, we can divide the reasons for the differences in three main axes: incentives schemes and contractual design, institutional setting and decision rights assigned to private operators, as we discuss in the next section.

#### *4.1 Incentives schemes and contractual design*

As we have seen in the section 2, the incentives schemes proposed by governments to reward the private operators influence the performance of the service provided. In prison services, specifically, the contract specification at the same time must incorporate the proper incentives for the private operator and also includes elements that are able to preserve the wider interests of the society.

In general in US, private operators charge the governments a daily-based rate for each inmate under their supervision. In this way, their financial performance is dependent on the number of "man-days" they can clock up so there are strong incentives to keep prisons at full occupancy rates. In order to assure their profit margins they are keen to reduce quality issues (hiring people less qualified with lower salaries, reducing the quality of the food, etc). From the government side it is not an easy task to check such actions and to enforce eventual quality problems. The presence of information asymmetry is relevant.

In France, the private operators (which have a reduced role in the prison operation) receive a fixed part and a percentage per additional prisoners held. Once, there is no performance clauses in the contracts, the private operators earnings do not depend of the obtained results, so that the incentives to spend less and to promote investments that lead to cost reductions are weak. The consequence of this contractual scheme is reflected in the cost indicators: prisons with privately provided services are more costly. In the French case, the superiority from the private companies in terms of quality seems to be related to the fact of these firms have strong experience in facilities management. All they had to do was to adapt their practices to correctional sector and to take advantage of scale and scope economies.

The type of contract signed between French government and private operators generates negative externalities which affect some other public prisons. Once the contracts foresee additional payments to the private company when the prison is above its capacity, the government avoids sending more inmates to the hybridly operated prisons. Consequently public prisons present higher levels of overcrowding and this factor contributes to a more

turbulent internal environment, which increases the uncertainty and poses additional problems to the managers of public prisons from the disciplinary and logistic point of view. On the other hand, the reduction of uncertain events within prisons with hybrid operation allows private operators (and also civil servants working in this kind of facility) to focus on the facilities priorities, moving the necessary resources to assure the services provision. These aspects can not be ignored when one analyzes the reasons for the differences between public and hybrid modes of prison services provision in France.

In the Brazilian case the contracts signed foresee the payment to private operator for holding inmates in a price cap contract. Once no additional payment is offered in case of overcrowding, there are two possible situations that can contribute for increasing the profit margins of the private operator: a) a reduced number of inmates under its responsibility; and, b) the implementation of optimization efforts. Naturally, the price cap contract mode stimulates efforts for cost reductions at expense of quality, however as we will observe in the sub-section dedicated to the decision rights issues, the presence of civil servants into the prisons can constrain socially undesired investments by private actors.

Regarding the reduction of the number of inmates, we can observe that a lower number of prisoners into the prison besides to provide savings in some direct expenses (less food, lower consumption of energy, etc) can generate also another positive externality: a peaceful internal environment, as with the reduction of prisoners it is expected the amount of eventual internal conflicts among inmates decreases. According the type of contract signed in Brazil, in case of undesired events, like riots, the private company is

the responsible for fixing the damages in the facility. In this way, the operator has also a strong economic motivation for maintaining a calm and peaceful internal environment.

Therefore, it is also evident that a non-turbulent internal environment allows prisons managers to concentrate their attentions in the resolution of other internal problems. Last, wherever the country or whatever the contractual mode, the ability of a prison manager in terms of keeping a calm atmosphere inside the prison can bring dividends for him/her in the future. If he/she is a civil servant, job promotions and other benefits related to his/her reputation might come true. If he/she is an employee of a private operator besides the effects above mentioned, the reputation of the private company plays a decisive role, once this is an essential aspect to get additional contracts in the future.

Within certain limits, prison managers (public or private) can deploy some actions in order to reduce the number of prisoners under its custody. Those actions are dependent of the ability of prison managers in bypassing some institutional constraints as we address herein after.

#### *4.2 Institutional constraints*

As we have seen, prison services are constrained by several formal institutions: political, regulatory, external, and judicial. Normally, it is up to the courts to determine who must get in or get out the prison or what prisoner has the right to alternative sanctions other than incarceration so that the reduction of the number of inmates in the prisons is dependent of the efficiency of legal matters and also of the social choices shared by the local judicial community (for example judges of certain regions or countries are more keen to determine harder sentences than others).

However, the slowness of justice is a stylized fact in many countries, mainly in those where institutions are not mature. We can identify several causes for the slowness in justice, including behavioral and cultural, but above all, slowness is the result of interests in delaying and in some deficient preparation, as well as, in the common non-existence of the appropriate human and material means.<sup>13</sup> Such institutional problem signals precaution to prison managers as the slowness in delivering judgments might generate internal conflicts inside the correctional facility, mainly when those judgments are related to benefits to be conceded to inmates, like appeals, probation, parole and other prisoner rights assured by the rule of the law.

In order to bypass such institutional constraints, private operators have both, economical motivations (or incentives) and alternative mechanisms for dealing with judicial constraints. In the Brazilian case, the private operator provided rewards to its lawyers according the release order obtained. At their own expense, the company has also hired administrative assistants to support the operational tasks of the local court. Overcrowding still is also a concern for private operator as courts can issue new warrants for more prisoners, superior to a prison's capacity, which might generate operational deficits for the private company. The company's collaborative approach with the local court can be a way of avoiding overcrowding in the privately operated prison. On the other hand, for the prison under public governance there are few chances of bypassing local judicial restrictions, and consequently a warden of a publicly managed prison has fewer instruments to control undesired effects, which might be originated from courts inefficiencies.

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<sup>13</sup> This sentence was inspired in the speech of the Head of Portugal' Supreme Court, which is available in Justice in the world (<http://www.richtervereinigung.at/international/justice3/justice317a.htm>)



Therefore, the analysis of the institutional environment matters (both of formal and informal kind) as institutions influence the incentives provided, restricting the margins for manoeuvres by the people in charge of operation. The actions to be implemented must take into account the effects of institutions and also the mechanisms to avoid its negative impacts. Once the correctional sector is embedded in a “nexus” of institutions it is clear that the choices aiming the most suitable governance structures relies on the characteristics of the local institutional environment and on the capabilities of public and private actors for dealing with them.

The relative success of the Brazilian case (of course as compared with the performance observed of the local prisons publicly managed) can tell us something about how the combination of different factors can be a key-element for governance structures choices. Nevertheless, considering the existence of a weak institutional setting such configuration is not stable. The possibilities of changing in some institutional component are plausible and according to the movements observed in political and regulatory institutions the contractual performance can be affected.<sup>14</sup> The relative “inflexibility” of institutions in developed countries like France and United States might also limit the actions of private operators.

#### *4.3 Decision rights*

Prisons are distinctive as compared to other public utilities, once scale economies and network externalities does not present the same magnitude in this sector as it might be

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<sup>14</sup> Most part of the local state governments in Brazil are known for not-being good payers. State authorities frequently delay the payment to its suppliers generating damages in suppliers ‘cash flow. Payment interruptions can lead to worse performance indicators in privately operated prisons. For the time being, it seems that private operators are only affording the situations of payments delay (and of course, avoiding to argue with local governments) in order to keep a good reputation and to obtain good references of their customers, which is essential for getting new contracts in the future.

observed in electricity, water and telecommunications industries, for example. The provision of prison services involves the supply of a bundle of different services, which includes security, food, maintenance, education, leisure and labor activities, medical and judicial assistance, among others. The malfunction of one of these parts has a tremendous potential for creating problems within prison walls. For instance, the bad quality of food is one of the main reasons for riots. One of the main driving factors for well succeeded contracts is related to the extent of decision rights delegated to individuals.

Public and private modes of governance present some differences in the way they allocate decision rights. As Hart (1995) stated in a principal-agent view, the delegation of authority and of decision rights can shape the incentives provided to agents. Delegation is also a tool for reducing the number of actors to be coordinated, mainly when several activities must be taken in place as we have in prison services. In the traditional provision, prisons managers must interact with other government agencies to provide health, education and labor to inmates. Such contacts are no conflict free, and that increases the frictions (transaction costs). From the principal point of view, when activities are delegated the coordination and monitoring efforts are more simple, since the number of interfaces are reduced. More agility can be observed in terms of procurement procedures and hiring policies in private arrangements. In Brazil, for instance, civil servants have job stability and purchases made by government organizations must be performed according to very strict and inflexible procedures. On the other hand, under private governance the possibility of contract termination is a credible threat that restricts opportunism behavior from agents. Purchase procedures are also more flexible and this leads to superior standards of performance, mainly in terms of speed.

In the US private model all decision rights are allocated to the private operators. The companies are able to set the details related to building the correctional facility and also issues related to details in the operation, such as: allocation of prisoners into the cells, education and reinsertion activities policies. It is difficult to the government to monitor the behavior of the private operator. Some of the delegated services are non perfectly contractible because they are not verifiable (e.g. use of violence, skill level of employees), so that in this contract framework the private companies have superior degrees of freedom. Once their movements are more difficult to control, we can observe the emersion of stronger incentives to profit maximization oriented actions.

In the French and Brazilian outsourced models the rights are split between government officials and private operators. What notably varies from one contract type to another is the degree of tasks delegated to non-governmental operators. As we have seen before, private operators are keen to be more flexible to manage and coordinate the effort of different suppliers as compared to the traditional provision. The advantage of hybrid forms relies on the presence of civil servants inside the prison, once they are able to verify the quality of the services provided and eventually to enforce sanctions in the case of some contractual non-conformity. Possibly that is the mechanism through which we observe an increase of quality standards in Brazil and in France in opposition to United States, where quality decreases.

The level of delegation is also one of the responsible for the cost differences between the two hybrid models. In France, fewer activities are delegated as compared to Brazil, where civil servants represent a small portion of the employees in privately operated facilities. The maintenance of *status quo* helps to crystallize in France the current practices, which

can impede the adoption of managerial innovations, as we have seen in the Brazilian example concerned to private lawyers and to heterodox actions for dealing with courts inefficiencies. In addition, from the financial point of view, civil servants normally receive better salaries and have some benefits that are not available in private companies. All of these factors lead to cost increasing when public management is concerned (Laffont, 2000).

Although the delegation of authority to inferior administrative levels can be positive in prison services there is a limit for that, once a meaningful part of the knowledge is tacit and specific and cannot be easily transferred to the managerial superior levels. Monitoring mechanisms are essential to avoid misalignment between the different administrative levels. Considering the absence of collusion, again the presence of civil servants within the prisons plays a leading role for avoiding opportunistic and non-ethical behavior from private company.

The analysis of the topics above demonstrated allow us to highlight that the achievement of a proper governance structure does not rely in one single aspect, but in the way that incentives, contractual design, decision rights and the nexus of institutions are combined. The combination of all these factors might represent a strong impact on performance indicators, in the positive or in the negative sense. The ability of public or private managers for dealing and eventually bypassing the constraints imposed is essential in the choice of the contractual mode.

## **5- Conclusions and next steps**

Despite the private participation in prison services is mentioned in some important theoretical economic models, there are not so many studies comparing the distinct

available governance structures. However, when one analyzes the few works produced about the subject in a cross-country comparative perspective, it might be observed striking differences in the outcomes observed: in United States private participation leads to a decrease in costs at the expense of quality reductions; in France we observe an increasing in both dimensions; and in Brazil it can be observed cost reductions with quality improvements. It is natural to ask why such differences occur.

In order to search answers for that question, we start from theoretical frameworks, which integrates several contributions of the economic literature focused on public-private arrangements, from the theories of incentives to the institutional analysis contents. We argue that the achievement of an efficient governance structure does not rely just in one single aspect, but that it is the result of the combination of several factors, namely local institutional environment, decision rights and contractual design. The ability of public or private managers for dealing with the imposed constraints is also a key aspect. Therefore, prisons might be good candidates for public-private partnerships since the proper configuration of the above mentioned factors is obtained.

The apparent superior results observed in the Brazilian case must be analyzed carefully. Probably, the better outcomes obtained by private operators are related with the deterioration of the public mode of provision. In this sense, if private companies do elementary actions, like providing the appropriate services to inmates, they will be in a better position as compared to traditional public provision. In addition, the results obtained are very dependent of a particular institutional configuration. In case of changes in the premises of political and judicial actors against the private provision, or in case of

their replacement, the results might not be sustainable (e.g. governments can change and start to expropriate private operators, which may lead to quality reductions).

We are sure that this is a preliminary attempt to tackle the subject and that are necessary more extensive studies. Although we have been experiencing some problems to get the data we are persuaded that only additional empirical studies will provide us the right answers to the questions we are aiming to ask. Those who might be interested in joining us in this journey are welcome.

## 6 - References

- ARCHEOEMBEAULT, William G. e DEIS, DONALD R. (1996) Cost-Effective Comparisons of Private Versus Public Prisons in Lousiana: A comprehensive analysis of Allen, Avoyelles ad Winn Correctional Centers. Reserach paper. Lousiana State University, 79 p.
- BAJARI, Patrick, TADELIS, Steven (2001). "Incentives versus Transaction Costs: A Theory of Procurement Contracts." Rand Journal of Economics 32, 387-407
- BAKER, George, GIBBONS, Robert and MURPHY, Kevin (2004) "Strategic Alliances: Bridges Between 'Islands of Conscious Power.'" Unpublished manuscript.
- BAYER, Patrick, POZEN, David. (2005) "The effectiveness of juvenile correctional facilities: public versus private management" Journal of Law and Economics, vol. XLVIII, October,.,549-589.
- BECKER, Gary (1968). "Crime and Punishment: An economic approach". Journal of Economic Perspectives, v.76, n.2, mar.-apr,169-217
- BLUSTEIN, James F, COHEN, Marc A. (2003). "The interrelationship between public and private prisons: Does the existence of prisoners under private management affect the rate of growth in expenditures on prisoners under public management", ACSME: Lousiana, April, 2003, 11 p. (mimeo)
- BRASIL (2006). Relatório de gestão DEPEN: Exercício 2005. Departamento Penitenciário Nacio nal, Secretária Nacional de Justiça, Ministério da Justiça, 119 p
- CABRAL, Sandro (2006). "Terceirizar prisões é uma boa alternativa?". Working Paper. Núcleo de Pós-Graduação em Administração UFBA. July, 2006.
- CABRAL, Sandro, AZEVEDO, Paulo (2005). "Dealing with incentives and institutions in prison management" In: IX Annual Conference of the International Society for New Institutional Economics, Barcelona, September, 2005

- CHONG, Eshien, HUET, Freddy, SAUSSIÉ, Stéphane and STEINER Faye, (2006), "Public-Private Partnerships and Prices: Evidence From Water Distribution in France", Review of Industrial Organization 29, #1-2, August-September 2006.
- COUR DES COMPTES (2006). "Rapport public thématique: Garde et réinsertion-La gestion de prisons". Cour des Comptes, France, jan. 2006, 179 p.
- DESRIEUX, Claudine (2006). "Le rôle de l'autorité publique dans la gestion déléguée des services publics locaux: une approche par la théorie des contrats incomplets", *Revue Économique*, may, 2006
- DILULIO, John J. Jr. (1996) "Help Wanted: Economists, Crimes and Public Policy. Journal of Economic Perspectives. Vol 10, n.1, Winter, 3-24.
- ESTACHE Antonio, (2006), "PPI partnerships vs. PPI divorces in LDCs", Review of Industrial Organization 29, #1-2, August-September 2006
- GLACHANT Jean-Michel, FINON Dominique, (2003) (eds.), *Competition in European Electricity Markets: A Cross-Country Comparison*, 13 chapters, Edward Elgar, (2003).
- GUASCH, Jose Luis (2004). Granting and Renegotiating Infrastructure Concessions: Doing it Right. Washington DC: World Bank Institute, 2004, 194 p.
- GUPPY, Paul (2003). Private Prisons and the Public Interest: Improving Quality and Reducing Cost through Competition. Washington Policy Center, February, 2003, 13 p.
- HART, Oliver; SHLEIFER, Andrei and VISHNY, Robert W. (1997) "The Proper Scope of Government: Theory and an Application to Prisons." The Quarterly Journal of Economics. vol. 112, n.4, nov.1127-1161.
- HART, Oliver (2003). "Incomplete Contracts and Public Ownership: Remarks and Application to Public-Private-Partnerships" The Economic Journal, 113, March, C69-C76.
- \_\_\_\_\_ (1995) Firms Contracts and Financial Structure. New York: Oxford University Press. 228 p.
- HOLMSTROM, Bengt; MILGROM, Paul (1994) "The Firm as an Incentive System." *American Economic Review*, 84, 972-91.
- HOLMSTROM, Bengt (1999) "The Firm as a Subeconomy." *Journal of Law, Economics, and Organization* 15, 1999, p. 74-102.
- LAFFONT, Jean-Jacques (2000) "Étapes vers un Etat moderne : une analyse économique", *Rapport Conseil d'Analyse Economique, Etat et Gestion Publique*.
- LAZERGES, Christine (1997). "Les Établissements Pénitentiaires à Gestion Mixte: À l'épreuve de l'observation". In: Lafarge, Philippe. Établissements Pénitentiaires à Gestion Mixte: Actes du Colloque de Montpellier, 17 Mars 1997. Ed. Pedone, Paris, 79 p.

- LEVY, Brian SPILLER, Pablo T. (1994) "The institutional foundations of Regulatory Commitment: A comparative analysis of telecommunications regulation". The Journal of Law, Economics and Organization. v.10, 1994, pp- 201-246
- LUKEMEYER, Anna; McCORKLE (2006). "Privatization of Prisons: Impact on Prisons Conditions" American Review of Public Administration. v.36, n.2, June, 189-206.
- MÉNARD, Claude (2004). "The economics of hybrid organizations." Journal of Institutional and Theoretical Economics 160(3), 1-32.
- \_\_\_\_\_ (2000). "Enforcement Procedures and Governance Structures: What Relationship?", *Institutions, Contracts and Organizations. Perspectives from New Institutional Economics*, Cheltenham, Edward Elgar, pp. 235-253.
- MITCHELL, Matthew (2003). The Pros of Privately-Housed Cons: New evidence on the Cost Savings of Private Prisons. Rio Grande Foundation. New Mexico. March, 2003, 21 p.
- SAUSSIÉ, Stéphane; MÉNARD, Claude. (2000) "Contractual Choices and Performances: The Case of Water distribution in France", Revue d'Economie Industrielle, 92, p. 385-404
- SHIRLEY, Mary. MÉNARD, Claude.(2002) "Cities awash: a synthesis of the country cases". In: SHIRLEY, Mary (ed.) Thirsting for Efficiency: The Economics and Politics of Urban Water System Reform. Oxford: Elsevier Science, pp.1-42.
- U.S. Department of Justice (2005). "Prison and jail inmates at the end of 2004". Bureau of Justice Statistics Bulletin. Office of Justice Programs. October, 14 p.
- WILLIAMSON, Oliver (1999) "Public and Private Bureaucracies: A Transaction Cost Economics Perspective". Journal of Law, Economics and Organization. Mar, 1999, 15:1.pp-306-342.
- \_\_\_\_\_ (1985) The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting. New York, The Free Press, 1985, 450 p.
- \_\_\_\_\_ (1976). Franchise Bidding for Natural Monopolies in general and with respect to CATV. Bell Journal of Economics, 7, 73-104