This paper analyzes the renegotiation of public-private partnership (PPP) contracts in the drinking water services in Portugal. Although the benefits of this kind of contracts are widely acknowledged, renegotiation is a major contract failure that may jeopardize its value for money. Renegotiation happens when the initial conditions of contract are changed and the two parties must enter into a bilateral agreement. This is carried out in an asymmetric information environment where the private partner outweighs the public sector and therefore it is able to extract rents from the contract. This paper analyses the privatization of water services in Portugal since 1994, when the first PPP contract was signed. It investigates the renegotiations that took place in this sector and their determinants following a case study methodology. The paper highlights that the excessive number of renegotiations is due to the inadequate sharing of risks and poor performance of the public partner. Some recommendations and contractual rules are presented to avoid renegotiation in PPP projects and, when it is inevitable, to constrain the rent of the private sector.

**Keywords:** renegotiation; risk sharing; water sector; regulation by contract

1. **INTRODUCTION**

Privatization has been gaining prominence for the past 20 years in infrastructure across the world. Searching for productive efficiency, higher quality of service, capacity to make large investments or ideology are some of the reasons pointed out to privatize an
infrastructural (Hart, 1988). Drinking water services are not an exception and since the 90s several countries have carried out deep privatization programs (Marques, 2010). Although a minor number of countries opt for the full divestiture model (e.g. England and Wales and Chile only partially), known in the water sector as the English model, most of them use public-private partnerships (PPPs). Both contractual PPPs (e.g. concession contracts) and institutional ones (mixed companies) are used to introduce private sector participation in the delivery of water services. The use of contracts in the water sector has been known as the French model which normally is associated with the provision of these services by the local government (e.g. municipalities). Although the theory points out good reasons for privatization, frequently the option of politicians for it is related to the so-called scissors effect (e.g. the very bad performance of in-house public services demands deep changes) or for gaining up-front rents. These reasons might distort the results when public and private management efficiency is compared (Marques, 2008).

PPPs in theory might be a good option, since there is a sound competition for the market (Demsetz, 1968) and the long term contracts, where rights and duties of both public and private partners are established, are carefully designed. However, in practice, this barely happens (Williamson, 1976). First, the contracts are incomplete and the reality changes with time, particularly during the course of 30 or 40 years. Therefore, renegotiations become necessary in order to adapt the contract to new conditions. Second, the bidders suffer from the optimist bias in the public tender stage and present overoptimistic bids thinking in the subsequent renegotiation of the contract in a bilateral way, which they normally get. Third, designing the contract, which is a complex and multidisciplinary task, requires a significant volume of resources (both human as financial). This is particularly serious at the local government level, where there is lack of resources, and contracts are inadequately designed and do not consider the renegotiation issue (Cruz and Marques, 2012c). On the other hand, the private companies are usually transnational or larger companies with great resources and know-how, thus creating an important gap between the levels of expertise on the two sides. As such, the access to the market, the risk sharing and transfer and the management contract issues are not conveniently dealt with. So, most of the contracts are renegotiated little time after being signed. In Portugal all PPP contracts in the water sector have already been renegotiated, some of them 3 or 4 times (Dinis and Marques, 2010). We believe this situation penalizes considerably the public interest and eliminates the potential benefits of privatization, since most of the renegotiation results are biased towards favoring the concessionaire.

This study reviews the PPP renegotiation cases in the water sector in Portugal, using two selected cases studies, which are representative of the Portuguese experience. The
detailed analysis of two PPP case-studies in Portugal, a contractual (concession contract) and an institutional one (mixed company), will provide important lessons. The institutional PPPs, little discussed in the literature but very popular in some countries (e.g. the Société d’economie mixte in France, the Stadtwerke in Germany or the Empresa Mixte in Spain), are analyzed in some detail (see Cruz and Marques, 2012d). This is a major contribute and an innovative aspect of this paper. These rigorous comparisons represent a first-step towards better understanding the full implications of the renegotiations. We conclude that in the cases where the contract fails the consequences are even more serious than it is generally recognized, and those cases may erode the advantages of developing PPPs.

This paper is organized as follows. Section 2 discusses the endogenous and exogenous determinants of renegotiation, as well as the rationale behind the process. Section 3 analyses the privatization in the water sector in Portugal and focuses on the major indicators of renegotiation. Section 4 analyzes two different empirical contracts from the standpoint of failures identified with two “popular” institutional arrangements. One corresponds to a concession and the other to a mixed company. Section 5 presents several key lessons for the design and monitoring of regulatory contracts concerning renegotiations, such as how to avoid them and to constrain their effect. Concluding observations are presented in section 6.

2. THE PROBLEM OF RENEGOTIATION

In the drinking water sector, contracts are frequently renegotiated. Guasch (2004) found that for Latin America (with a sample of 1,000 contracts) 75% of the water concession contracts were renegotiated after an average of 1,6 years after their signature. According to this research, a higher incidence of renegotiation occurs under competitive bidding, price cap regulation, the non-existence of a regulatory body, compulsory investments, and when award criteria are based on the lowest tariff and the legal framework is embedded only in the contract (Guasch, 2004). Renegotiation represents a major disappointing outcome for PPP contracts (Marques and Berg, 2010). Under renegotiation, there is bilateral bargaining to restore a mutually acceptable situation for the parties; however, without competitive options, the operator will always have more information on the implications of alternative contractual arrangements – problem of information asymmetry (Holmstrom, 1982). Thus, service providers tend to be in a position to impose their requirements. Bajari et al. (2006) shows empirically that renegotiation unavoidability leads to an extra cost on users. This can happen directly, towards increases in uses charges, or indirectly through governmental compensations
disseminating the cost for the entire society. Furthermore, such changes in the rules of the game undermine the legitimacy of the original contract award.

Renegotiation is associated with the risk allocation and transfer. The main theoretical benefit in PPPs is that risks would be assigned to the contractual party that is best able to mitigate them or to bear them (Grimsey and Lewis, 2002; Meda, 2007). This allocation minimizes the economic costs associated with such risks. From this perspective, the municipality should not transfer the risks that are under its control to the private partner; nor should it (as it represents taxpayers) assume the risks that are out of its control. The problem is that most contracts have clauses protecting the private sector from bearing such risks while ensuring economic and financial equilibrium during the contract (Marques and Berg, 2011). If it is clear that exogenous events would lead to the contract renegotiation, such events (related to risks) should have been assigned to appropriate parties and carefully defined ex-ante. The allocation of risks and the contractual clauses affecting the economic and financial equilibrium are required to avoid opportunistic behavior and to provide the value for money of the project.

This issue is exacerbated in PPPs since frequently in the public tender stage the preferred bidder is the most optimistic and not necessarily the best one (Marques and Berg, 2010). For example, if the sponsor considers the average tariff as a bid evaluation criterion but it does not standardize the population, clients, consumption per capita and their evolution over the time, the wrong bidder may be chosen as the best one. In fact, one may argue that the chosen bid will be the most optimistic. This phenomenon is not exclusive of water concessions, but it is also observable in road concessions (Hong and Shum, 2002). In these cases, the public interest is damaged twice as the best bidder is not chosen and soon the contract will be renegotiated. As shown by Guasch (2004) and Cruz and Marques (2012a), the question is not whether the contract will be renegotiated, but when, since the probability of renegotiation is extremely high. Another relevant aspect is that evaluators should also focus on the particular aspects of a PPP contract, such as the outcomes of sensitivity analyses of the bid (business case) to adverse situations (e.g., consequences of a substantial drop in demand or in macroeconomic recession), the financial ratios and the shareholder rate of return (IRR) of the business case since these are the ones taken as basis for the renegotiation bargain (financial and economic equilibrium of the business case). The outcomes are not the same if one bidder presents an IRR of 10% or an IRR of 15%. Note that the average tariff might be the same of these two bidders. Different IRR will lead to diverse results in the renegotiation, since the clauses for restoring the financial equilibrium frequently determine that the IRR should be kept at the same level (it is not rare to find clauses that determine a variability of only 0.01% in this ratio). Moreover, it should be emphasized that the tender documents are frequently badly prepared, not just the forecasts for
consumption, but also the investments plans. If more studies and information are collected before the tender call notice, all the parties will benefit (Crampes and Estache, 1998).

This discussion on what influences renegotiations shows how these can be determined by several effects, some related with the contract itself, while others are related with external (out of the contract) factors. Cruz and Marques (2012a) classified these determinants as endogenous and exogenous, if they concern clauses embedded in the contract, or if they concern external factors. Table 1 summarizes these determinants.

<table>
<thead>
<tr>
<th>Table 1 – Main exogenous and endogenous determinants for renegotiation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exogenous</strong></td>
</tr>
<tr>
<td>External context</td>
</tr>
<tr>
<td>Procurement process</td>
</tr>
<tr>
<td>Project characteristics</td>
</tr>
<tr>
<td>Financing scheme</td>
</tr>
<tr>
<td>Regulatory framework</td>
</tr>
</tbody>
</table>

Source: Cruz and Marques (2012a)

Finally, another important aspect is the deficient monitoring of the PPP contracts. Local governments, most of the time, do not manage the contract conveniently and when the renegotiation is asked they do not have enough information nor do they know the contract appropriately (Cruz and Marques, 2012c). In addition, when renegotiation is required there is a great demand to the local government in terms of resources (and costs). Local governments are not prepared for that and end up accepting the conditions proposed by the private sector. Since the local government officials are often the same that designed and signed the contract, there is certain reluctance in acknowledging that the contract has failed, thus leading to accept the private sector requests, without mention the problem of “capture of the public partner” by the private sector.

Contract renegotiation can take place under different frameworks. The contract may include clauses for dealing with renegotiation, or may not have any formal rule, and therefore the renegotiation relies solely on a common understanding between the parties. Cruz and Marques (2012b) call the first case, a discretionary renegotiation type, while the second is a form of contractual renegotiation. One might expect that the existence of specific rules for managing the renegotiation process would ensure a fair protection to the public sector, but that is not the case, as the case studies will demonstrate (Section 4).
3. THE WATER SECTOR IN PORTUGAL

3.1 Institutional model

The water sector in Portugal follows the French institutional and regulatory model where the water and wastewater activities are under the responsibility of local government authorities that may delegate them to the private sector. However, comparing it with the French model, there are some differences, such as the separation between wholesale (bulk) and retail (end-user) services which correspondingly refer to regional systems and municipal services, the State is the main operator through state-owned companies in the regional systems and there is a sector-specific regulatory agency, The Water and Waste Services Regulation Authority (ERSAR), which supervises the Portuguese water market. The municipal authorities can choose between four provision models, respectively: the municipal services (activities provided directly by municipalities), the semi-autonomous utilities (with administrative and financial autonomy), the municipal companies with or without a private shareholder and, finally, the concessionaire companies. The first three models are under public management carried out by the local municipal authority or the State, whereas the concessionaire companies are under private management. The mixed company (institutional PPP) is under the public sector control.

Private sector participation was not introduced into the water and wastewater activities until 1993. From that year on, local municipal authorities are allowed to delegate these functions to private sector companies under the existence of a public tender. With the possibility of private sector participation, it became necessary to monitor and supervise these activities. After some unfortunate experiences (e.g. the creation of an observatory), a regulatory agency (IRAR) was set in 1998. This authority gives its opinion about the public tender documents, the signed contract and the renegotiation process. Additionally, it supervises the quality of service provided by the private companies.¹

During the last decade, the water sector in Portugal presented an extraordinary development, which enabled a huge advance in the water utilities expansion to almost the entire Portuguese population, not only due to the European funds but also to the significant effort that the utilities have performed. However, it is still necessary to solve some problems relative to the efficiency and effectiveness of the activities performed, such as water losses, excess of staff in urban areas and insufficient in rural areas, inadequate tariff systems, inefficient asset management and low levels of quality of service provided to the users. If in the past the challenge was to expand and increase the

¹ From 2012 on ERSAR regulates also the services provided by the municipalities.
coverage of water and wastewater services, today it is certainly to improve the performance (Marques, 2008).

3.2 Market structure

Until the reforms of 1993, the water utilities were almost wholly vertically integrated. In that year the Government paved the way to the creation of the bulk (regional) services both in water and wastewater. These services belong to the State as a major shareholder and include municipalities with minority shareholder positions. Several state-owned (regional) companies were created (18 in total encompassing near 60 per cent of the population), one of them only for water (abstraction, treatment and transmission), others only wastewater (final transportation and treatment wastewater), others for water and wastewater and another one for water, wastewater and solid waste. The customers of these companies are exclusively the municipalities. In horizontal terms the utilities have a reduced degree of integration, as there are 300 utilities for almost 10.3 million inhabitants from which 25 per cent is supplied by private operators. In Portugal, only 18 water utilities supply a population of more than 100,000 inhabitants and 109 cover a population of less than 10,000 inhabitants.

Concerning the services delivered, the utilities provide, almost always, the water and wastewater services together. They often include the urban solid waste services and, less frequently, other activities such as the transportation. There is only a limited number of operators that provide water and wastewater services individually.

3.3 Private sector participation

In Portugal, until the end of 2011 about 50 international public tenders were launched by the Portuguese municipalities (or their associations) with the aim of selecting a private partner for the management of the drinking water (and wastewater) services. 35 of them were successful. The model mostly chosen was the PPP of contractual type by concession agreements (31 against only 5 of institutional type). Some of the tenders were not awarded due to the change of local government or because the mayor decided so (e.g. by not agreeing with the decision of the awarding committee about the best bidder). In the drinking water sector the population supplied by the private sector reaches almost 25%. Table 2 presents the PPPs that have already been signed in Portugal.
Table 2 – PPPs in the drinking and wastewater sectors in Portugal

<table>
<thead>
<tr>
<th>PPP type</th>
<th>PPPs no.</th>
<th>Population (Inhab.)</th>
<th>Average (Inhab.)</th>
<th>Median (Inhab.)</th>
<th>Minimum (Inhab.)</th>
<th>Maximum (Inhab.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractual type</td>
<td>31</td>
<td>1.877.900</td>
<td>64.755</td>
<td>52.871</td>
<td>7642</td>
<td>170.683</td>
</tr>
<tr>
<td>Institutional type</td>
<td>5</td>
<td>322.847</td>
<td>64.569</td>
<td>54.506</td>
<td>21.102</td>
<td>164.193</td>
</tr>
</tbody>
</table>

In Portugal the first entity to launch a PPP for the management of environmental services was the municipality of Mafra which, through a public tender started in 1993, consulted the market to assign the operation and management of its water supply service to a private partner. This tender was the one with higher number of bidders so far (it attracted 9 players). The average number of bidders was 4 for all the tenders but there were some tenders with only one bidder because of their low degree of attractiveness. The average time elapsed between the launching of the procedure for selecting the private partner and the full implementation of the delegate management in the sector was 22 months. This is a very long period, highlighting the complexity of these processes and the difficulty of the municipalities to deal with it.

The maximum term of a PPP of contractual type is now limited by law to 30 years. There are some existing partnerships whose maximum term is 35 years (e.g. municipality of Cartaxo) and others with less than that because they did not include investment (leasing or aftermage contracts). In the case of institutional PPPs, given that the call-option is possible for both partners, the maximum term of the partnership does not apply.

Concerning the drinking water and wastewater sectors, there are several players (private companies) working in Portugal including the AGS – Administração e Gestão de Sistemas de Salubridade, S.A. (capital held 100% by Somague Ambiente which makes part of the Group Sacyr Vallehermoso); Indáqua – Indústria e Gestão de Águas, S.A. [capital held by Mota-Engil (42.86%), Soares da Costa (28.57%) and Hidrante (28.57%)]; the company Aquapor/Luságua, which belonged to the Group Águas de Portugal, today belong to the companies Alexandre Barbosa Borges (ABB), S. A. and Domingos da Silva Teixeira (DST); the Compagnie Générale des Eaux Portugal, S.A. (held by Veolia Water); the Geswater – Águas e Resíduos, SGPS, S.A. (whose shareholders are the ABB and the DST and BragaParques – Estacionamentos de Braga, S.A.; a Aqualia – Gestión Integral del Agua, S.A. (held by FCC – Fomento de Construcciones y Contratas, S.A.); and Lena Ambiente, S.A. (belonging to Lena group). The group Aquapor is the market leader, followed by AGS and by Indáqua.

Although there are many conflicts between municipalities and private entities, none of the PPPs, to date, has been prematurely terminated (by rescission). Anyway, most
contracts have already been renegotiated, at least once, and several of them have undergone multiple restoring of the economic and financial balance.

3.4 Renegotiations

All the PPPs in Portugal have already been renegotiated, some of them 3 or 4 times and, generally, in a very early stage of the contract (Cruz and Marques, 2012a). Renegotiation always takes place in one direction (of the concessionaire) and until now there is no situation in which the sponsor has triggered it. The main reasons for renegotiation are the volume of consumption (or wastewater much lower than what was initially forecasted (optimism bias), change of the investment plans (unilateral change by the sponsor ), change in law, change of the “bulk” water price and change of the scope and PPP object, among other factors. In general, as we will see next, the contract includes a clause of financial and economic recovery that mitigates the risk for the private partner in the project where the aspects that may trigger the process of renegotiation are presented (percentage change of 15% of the volume of distributed water in relation to the one expected in the initial base case).

The economic and financial balance might be restored in different ways, including the rise of tariffs, the change in the term of the partnership, the increase or decrease of financial nature obligations and the allocation of direct compensation or the combination of them.

4. CASE STUDIES

4.1 Purely contractual PPP: Case A

Consider the case of the Municipality A with 30.0000 inhabitants (about 13.000 customers) which is representative of this type of contracts of the Portuguese municipalities. It enters in concession arrangement with a private company for 30 years comprising its water and wastewater services. The contract includes an amount of 10 million Euro of investment and an annual payment of 1 million of euros to the municipality. There were 7 bidders in the public tender. The process took 2 years and the criteria and weight for choosing the preferred bidder were the average tariff (70%), quality of service (10%), safety of the provision (10%), strength of financial and contractual structure proposed (4%), quality and appropriateness of the plan of proposed investments (4%) and the payment to the municipality and its temporal distribution (2%). All the criteria are divided in several subcriteria. In addition, it presents an
economic and financial equilibrium restoration clause which reduces the sharing and transference of risks and consequently increases the probability of renegotiation.

Table 3 summarizes the contents of this clause. Finally, it should be highlighted that there are few rules for the contract management (only the information required to be sent by the concessionaire, sanctions of the bad performance and the earlier termination mechanisms) and there is no structure and means predicted to carry out this activity, which, unfortunately occurs quite often. The earlier termination mechanisms are also (as usual) little favorable for the sponsor, being almost impossible to put them into practice (to the authors knowledge, this has never taken place).

Table 3 – Clause of restoration of financial and economic equilibrium

<table>
<thead>
<tr>
<th>Changes requiring restoration of financial/economic equilibrium</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change greater than 20 % (up or down) of the annual volume of water distributed predicted by the bidder</td>
<td>Consumption</td>
</tr>
<tr>
<td>Change greater than 20 % (up or down) of the annual volume of wastewater collected predicted by the bidder</td>
<td>Consumption</td>
</tr>
<tr>
<td>Expansion or reduction of the system scope concerning the works predicted by the concessionaire</td>
<td>Several</td>
</tr>
<tr>
<td>Change of the amount of investments proposed by the business case of concessionaire</td>
<td>Several</td>
</tr>
<tr>
<td>Meaningful change of the rules or legislation which leads to the alteration in equipments and procedures</td>
<td>Legal/regulation/operation</td>
</tr>
<tr>
<td>If the concessionaire has to bear charges related to the factors that could not be predicted at the date of contract signature as, for example, new taxes, tariffs or taxes determined by new legislation</td>
<td>Legal/regulation</td>
</tr>
<tr>
<td>Change greater than 20% of the annual average value of Euribor (6 months) when compared with the previous year</td>
<td>Financing</td>
</tr>
<tr>
<td>If the price of wholesale services (water and wastewater) suffer a change different from the one proposed at the date of public tender</td>
<td>Operation</td>
</tr>
</tbody>
</table>

The concession contract of Municipality A suffers from several pitfalls leading to a higher probability of renegotiation. First, as we can see in table 3, most of the risks are retained and borne by the public sector, such as consumption (water and wastewater after a trigger of 20% change), legislation, financing, unilateral change by the sponsor and construction risks. Concerning the latter, note that the change of the amount of investments proposed by the business case of concessionaire lead to the renegotiation of the contract. Second, the public tender was launched as the public work tender does not take into account the particularities of a PPP contract (e.g. the shareholder rate of return, which is the basis for the restoring the economic and financial equilibrium, is not assessed). For example, the consumption was predicted by the concessionaire leading to the optimism bias since the average tariff had a score of 70% in the evaluation of the
bids. Therefore, probably the winner bidder was not the best one and it is very likely that renegotiation might take place.

In approximately ten years the contract was renegotiated 3 times, always penalizing the previous contract in the direction of the public partner restoring the shareholding rate of return.

4.2 PPP of institutional type: Case B

Consider now the Municipality B with 60,0000 inhabitants (about 30,000 customers) which is representative of the institutional PPP model in Portugal. A municipal company sold 49% of its shares to a private company by almost 20 million Euros. The mixed company is regulated by the statutes, management contract and shareholders agreement. The life span of the company is 40 years and it has to invest 60 million Euros in the first 4 years. It includes water, wastewater and drainage and the private partner is remunerated by the dividends paid by the mixed company, having two contracts with them, one of technical assistance (4.5% of the turnover) and the other relative to the management fees (2% of the turnover). There were 5 bidders in the public tender. The process took 1 year and the major criteria and weight for choosing the preferred bidder were the average tariff (50%), the appropriateness of the investment plan proposed (20%), the technical quality of the bid (10%), the economic and financial viability study for a period of 30 years (10%), the proposed of statutes and the shareholders agreement (5%) and the statement of commitments of guarantee of investments (5%). Unlike the average tariff, the remaining criteria have several subcriteria. As the concession contracts, the management contract and the shareholders’ agreement display an economic and financial equilibrium restoring clause which reduces or even eliminates the sharing and transference of risks and consequently institutionalizes the renegotiation of the contract every year. Table 4 shows the contents of this clause. Note that the shareholders’ agreement defines the rate of return of the mixed company with a centesimal precision, meaning that each year the tariff will change (rising) for the company to achieve the profits defined in that agreement. The rules for the contract management defined are also not enough, being exacerbated by the fact that the public partner is an active partner in the company (as it has the majority of the shares) and therefore it is not able (or hardly) to self-sanction (see Cruz and Marques, 2012c). The earlier termination of the partnership known as call-option in the mixed companies is regulated in the shareholders’ agreement and is very harmful for the public sector, since it has to pay a disproportionate compensation to the private partner. The call-option can be opted by both partners (public and private) when there is a deadlock.
Table 4 – Clause of restoration of financial and economic equilibrium

<table>
<thead>
<tr>
<th>Changes requiring restoration of financial/economic equilibrium</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal change of volumes not predicted in the economic and financial viability study of the public tender</td>
<td>Consumption</td>
</tr>
<tr>
<td>Significant expansion of capacity requirements not predicted in the Plan of Investments</td>
<td>Several</td>
</tr>
<tr>
<td>Meaningful change of the rules or legislation which leads to the alteration of the conditions reflected in the initial bid</td>
<td>Legal/regulation</td>
</tr>
<tr>
<td>If the mixed company has to bear charges related to the factors that could not be predicted at the date of shareholder agreement signature as, for example, new taxes, tariffs or taxes determined by new legislation</td>
<td>Legal/regulation</td>
</tr>
<tr>
<td>Change greater than 30% of the annual average value of Euribor (6 months) relative to the date of signature of financing contract</td>
<td>Financing</td>
</tr>
<tr>
<td>If there is any unilateral change initiated by the municipality, implying changes in the business case of contract</td>
<td>Unilateral changes</td>
</tr>
<tr>
<td>If some form of force majeure takes place</td>
<td>Force majeure</td>
</tr>
</tbody>
</table>

As we can see in table 4, the risks are nearly all retained by the public sector (consumption, legal/regulation, unilateral changes, force majeure and financing risks). The rate of return is completely ensured by the mixed company and consequently by the private company. The problems with the optimistic bias and the wrong criteria used in the public tender stage are also important here. As mentioned earlier, the private partner can strategically overbid based on unrealistic forecast, and counting on clauses of restoration of financial and economic equilibrium that will allow for an early renegotiation. After the renegotiation, he can expect to break-even (strategic behavior). Finally, it should be noticed that the management contract in mixed companies is almost impossible to occur, at least in an efficient way, since the public partner (municipality) is a relevant actor in the management and therefore it has the same or more responsibilities than the private partner in the performance of the company. So, the question on the table is who protects the customers in the mixed company (institutionalized PPP) model?

CONCLUDING REMARKS

In this paper some lessons of privatization of the Portuguese water sector are presented. First, the tender documents should be designed with a great care (Marques and Berg, 2010). Therefore, template documents should be defined, recognizing that ‘one size fits all’ is not acceptable and the draft of a proposed contract design should be provided as an annex in the public tender documents. Second, an external entity (regulator) should be established. Monitoring the PPPs by an external independent regulator whose involvement should begin with the design of tender documents benefits citizens. Note
that even when the law gives final authority to local municipalities, the external regulator can provide a reality-check on the terms and conditions of the contract and can support the municipality in evaluating the performance of the PPP. Third, baseline studies should be prepared. There is strong evidence of the need for more comprehensive studies prior to launching a PPP. At a minimum, the documents should provide complete information about trends in infrastructure system operations and the objectives of the PPP but it should also involve the developing of the public sector comparator (a baseline) and provide bidders with a template for a business plan. The public sector comparator will allow verifying the value for money of the selected proposal. Fourth, in the public tender evaluation selection criteria should be prioritized taking into account the specificities of the PPPs. As the probability of renegotiation and alteration of the initial regulatory premise are substantial, the criteria should include an analysis of how such situations are to be mitigated and when disputes occur, how the public interest is to be defended. It was demonstrated that the existence of rules for restoring the financial equilibrium is not enough, if those rules are not fair. Fifth, competitive bidding should be facilitated since more bidders for the PPP imply more value for money. Therefore, only the documentation strictly necessary should be required, reducing the high costs for participating in the bidding process. Sixth, the allocation of risks should be presented in an explicit manner, since it minimizes the likelihood of renegotiation but also saves money (mitigating risks, thus reducing the economic cost of bearing risk). Seventh, sanction procedures and monitoring should be simplified and, finally, transparency should be ensured.

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