

## Nuno Ferreira da Cruz and Rui Cunha Marques Mixed companies as local utilities

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## **Mixed Companies as Local Utilities**

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## **Mixed Companies as Local Utilities**

### **Abstract:**

The use of public-private partnership arrangements by public authorities has been a hot topic in recent literature. Both practitioners and academics stress the need to expose best practices and develop guidelines to cope with these complex governance structures. Nonetheless, research on the specific case of mixed companies (institutionalised public-private partnerships) has been somewhat neglected. This paper discusses the rationale behind the use of these arrangements by local governments. Although theoretically the model has some merits, in practice it usually fails in protecting the public interest.

**Keywords:** local government; public-private partnerships; procurement.

## 1. INTRODUCTION

The increasingly strict limits on debt imposed on local and regional governments (in Europe and elsewhere) forced most decision-makers to consider the use of private money to fund public infrastructure (Hodge, 2004). Simultaneously, the decentralisation reforms observed globally made sub-national governments responsible for the provision of a significant number of public services. These two conflicting forces resulted in a move from traditional public procurement towards public-private partnership (PPP) arrangements. The models of direct public production do not always provide the flexibility sought by local politicians (e.g. in terms of human resource management, contracting out parts of the service, etc.) and sometimes are considered inefficient or unable to provide value-for-money (Shleifer, 1998). Nonetheless, recent studies show that private production is not necessarily cheaper and that additional emphasis should be placed on the regulatory framework rather than on the make or buy dilemma (Bel *et al.*, 2010).

To be precise, PPP arrangements are more than just alternative procurement procedures. When entering in this type of agreements, a local government is not simply seeking the construction of an infrastructure but is also looking for the delivery of the general-interest services associated with that infrastructure. Hence, PPP agreements work as governance structures for the production of public infrastructure services (Hodge and Greve, 2010). To benefit from the attractive features of these arrangements (such as the off-balance sheet treatment, EPEC, 2010), local governments must certify that: (1) the private partner contributes with equity (and not just debt, to ensure real commitment), (2) the agreement represents a long-term relationship (adopting a whole life-cycle

approach where the private partner should be remunerated directly by customers through fees), and (3) the private partners bear a significant amount of risks (whenever the private sector is better prepared to manage them, thus reducing the economic cost of each risk).

There are two main types of PPP arrangements (European Commission, 2004a). In a purely contractual type (cPPP) the private partner is solely responsible for the production of the services and its rights and duties are thoroughly established in a written contract (transactional approach to governance). Concessions are the most common governance models within this type of PPP, although some other arrangements might occur at the local level (e.g. *afférmage* and management contracts, for detail see Marques and Berg, 2010). On the other hand, institutionalised PPPs (iPPPs) consist of mixed capital firms (joint ventures) where the public and private partners gather to jointly manage and produce the services (relational approach to governance).

The mixed company model appears as an alternative both to the traditional public production and to the delegation of utility services to private firms through concession contracts (Marra, 2007). Although in Italy and Spain mixed companies are now widespread in several infrastructure sectors (and their presence is becoming more significant in other countries, e.g. France, Portugal and Germany), this is a relatively new model for procuring, financing and manage utility services (gas, electricity, water, urban waste, urban transportations, etc.). Government ownership can be direct or indirect (when a publicly-owned entity other than the municipality owns the shares) and the process usually takes place with the local government creating a municipal company

and then selling part of the shares to a private investor (preferably, in the EU, the winning bidder of a public tender). The selected private investor is then precluded from selling its shares to a third party unless the public authority gives such authorisation and both free competition and transparency principles are secured.

In spite of these definitions, in PPP agreements there are no *prêt à porter* procedures. Due to problems of “bounded rationality” (Williamson, 2002), the long-term character of these arrangements renders PPP contracts necessarily incomplete (thus, prone to *ex-post* opportunism). The failures of regulatory contracts (disputes with operators, bankruptcy, decreased quality of service, renegotiation of contracts with clear damage to the public interest, etc.) emphasise the need for local decision-makers to understand the strengths and weaknesses of every governance structure at hand.

This paper scrutinises the use of mixed companies by local governments for the production of public infrastructure services, providing a concise overview of the strengths and limitations of these arrangements. It concludes that the municipalities that wish to adopt this strategy should devote special attention to contract management. Usually, the payment mechanisms devised do not expose the private partners to any type of risk (in fact, downside risks are often transferred to customers). In addition, since public authorities have effective responsibility in the daily management of the services, there are no incentives for the application of financial sanctions to the companies in case of poor performance.

## 2. PUBLIC AUTHORITIES' REASONING

Currently, the empirical literature on iPPP arrangements is still scarce, especially regarding the thorough analysis of real case-studies. The scrutiny of tender and contractual documents from four Portuguese local iPPP agreements (Cruz and Marques, 2012), the analysis of the operating costs and investments made by public-private Italian water utilities (Marra, 2007), and the *Resource Book on PPP Case Studies* (European Commission, 2004b) are among the few exceptions. Despite this lack of attention, mixed (municipal) companies have a substantial presence in the EU. Indeed there are now hundreds of these entities operating at the local level mainly in Italy, Spain, Portugal, France, Germany, Hungary, Greece, and Sweden (Verdier *et al.*, 2004). In addition to a strong presence in Europe, local mixed companies are also found in Latin America (mostly in Colombia but also in Cuba and Mexico, Marin, 2009).

Usually, these companies deliver local infrastructure services, including utility services such as drinking water supply, wastewater collection and treatment, urban waste collection and treatment and energy supply. Since these services entail non-recoverable investments in infrastructure with a high degree of asset specificity (sunk costs) and because there is necessarily uncertainty involved (inherent to long-term agreements), dealing with a private investor might lead to a complex situation of bilateral monopoly. Hence, with the mixed company model, local decision-makers try to lessen the problems of incomplete contracts and solve disputes at the core (i.e. in the board of directors) without the use of litigation or arbitration (adopting a relational contracting approach, Reeves, 2008). This is in line with the “alliance model” of PPP arrangements,

where a “process management” strategy is implemented to cope with complexity (Edelenbos and Teisman, 2008).

The reasons for a local government to opt for a PPP arrangement instead of direct (municipal services) or indirect (100 per cent public municipal companies) public production are well known and discussed elsewhere (e.g. see McQuaid and Scherrer, 2010). One of the drivers influencing the choice of local politicians towards mixed companies is the ability to keep control over the services. Indeed, in most cases, the public authority owns the majority of the shares (typically 51 per cent), thus retaining the dominant influence (e.g. see Bognetti and Robotti, 2007, Cruz and Marques, 2011, González-Gómez *et al.*, 2009, Oelmann, 2009, Verdier *et al.*, 2004). Generally, this participation is achieved by monetising the existing public infrastructure that is allocated to the company (e.g. in water and urban waste utilities regardless of the current state of conservation of the systems). Different ownership structures (where the private partners hold the majority) usually denote objectives other than managing general-interest services (that would not be produced or would be produced under different conditions if there was no public intervention). However, in the EU, the “proper scope for government” does not include profit-seeking activities (at least in principle).

By choosing an iPPP arrangement, local governments keep the services at arm’s length and benefit from the private sector’s know-how, but still aim at steering the companies towards (unprofitable) social goals (such as improved quality and equitable fees). The ownership allows the public partner to gather more (and better) information and to have



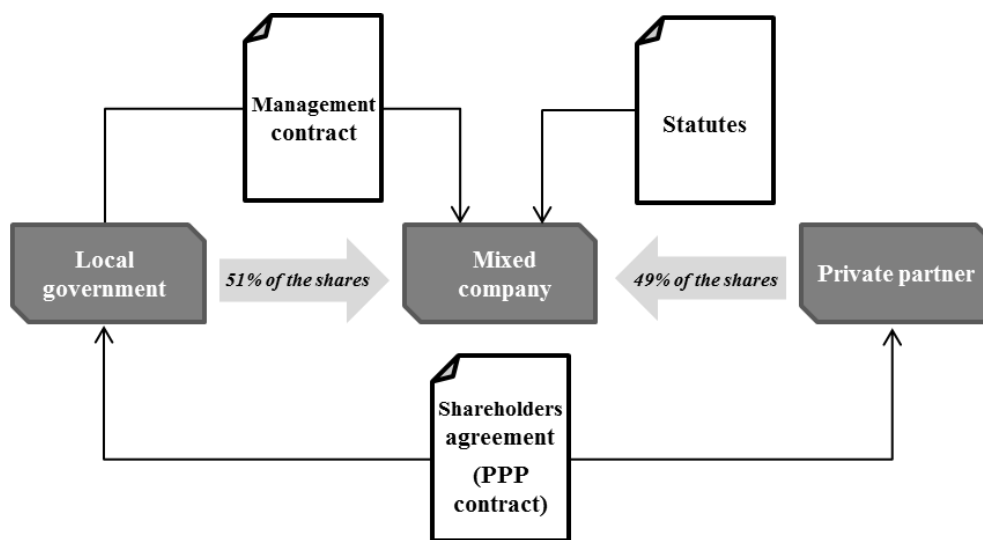
a say regarding the actual management of the firm (Marra, 2007). In fact, this model is not seen as a “normal” privatisation and this has some political advantages (e.g. less public contestation, the capacity to appoint “political managers”, etc.).

Another, and perhaps more important, reason to choose a mixed company over any other alternative is the possibility of receiving an up-front payment from the private investor. To acquire a (usually minority) stake in the share capital of the firm, the winning bidder of the public tender has to buy the shares at an interesting price for the municipality (this process is often considered to be a partial privatisation, Bortolotti *et al.*, 2003). This gives an opportunity for local governments to obtain what is actually a “loan” that does not add up to the severe debt limits imposed on them.

### **3. THEORETICAL CONSIDERATIONS**

Despite being a relational agreement, where the “spirit of the contract” should prevail over the “letter of the contract” (Macneil, 1974), the scope for action of both public and private partners in an iPPP is crystallised in a complex web of contracts (figure 1). The documents that constitute the actual regulatory contracts of mixed firms are the shareholders’ agreements (firmed between the partners and setting their rights and duties), the management contracts (firmed between the companies and the competent public authorities, setting the objectives to be attained) and the statutes (setting the internal rules of the companies). Hence, to benefit from the increased flexibility that an iPPP can provide to cope with uncertainty, local governments ought to craft an optimal regulatory framework for the mixed companies (Kayaga and Zhe, 2007). This

framework should encompass market access issues (the award criteria and methodology must lead to choosing the best bidder and not the most optimistic or generous) and contract monitoring issues (the public partner must have means to evaluate the observance of the contractual clauses by the private partner and effective power to issue rewards/sanctions when appropriate).



**Figure 1 – Typical contractual framework of local mixed companies**

One of the most important theoretical strongpoints of mixed companies is the increased access of the public partner to valuable information regarding the day-to-day operations (reduced information and monitoring costs due to property rights). Indeed, the ownership should reduce asymmetric information (a serious shortcoming of cPPP arrangements) and allow public authorities to cope with principal-agent problems through “internal regulation” (Marra, 2007), thus curbing the risk of *ex-post*

opportunistic behaviour (and balancing the relative bargaining power of the sides in case of renegotiation).

In spite of being accurate to say that information costs can be reduced (and thus the public authority is better able to know the location of the production frontier, curbing monitoring costs), one cannot provide a general verdict regarding the overall transaction costs involved with mixed companies (which include the ones incurred during the procurement phase). Indeed, the complexity of mixed firms calls for comprehensive *ex-ante* costs (and particular expertise, for instance in the preparation of all the draft contracts and articles of association) even though, in theory, *ex-post* coordination costs may be lower for this model when compared to purely private production (e.g. concessions). Moreover, *ex-ante* costs could be curbed if local governments are able to consult standard tender documents, template agreements or “best practice contracts” (e.g. see NDFA, 2007 and PViS, 2009).

Due to the increased pressure for commercial viability that comes with private sector participation, mixed companies seem to attain better results than public companies in terms of financial performance (although private companies still perform better in this regard, Boardman and Vining, 1989). Nevertheless, a superior overall efficiency of general-interest services is not necessarily associated with extremely good figures regarding financial indicators and it depends on many other factors besides the ownership structure. The rationale behind mixed companies is to find the perfect equilibrium between efficiency and social concerns. The idea is to merge the private sector objectives of profit maximisation (incentives for cost-efficiency) with the public

sector objectives of consumer satisfaction (incentives for equity and quality), thus maximising the overall welfare.

In theory, if reducing costs is likely to cause (for social reasons) an unacceptable decline in quality, then public ownership might be preferable; otherwise, if improving quality may lead to substantial cost increases, private ownership can be more attractive (Schmitz, 2000). Partial privatisation could then be optimal when both problems coexist. However, it is not clear that iPPPs prevent over-investments or even higher costs, for instance, with outsourcing (usually carried out by one of the private partner's companies). In fact, some argue that firms jointly owned by the government and private investors may result in the worst of both worlds, where neither profitable nor social goals are successfully achieved (Eckel and Vining, 1985). This dreadful outcome can have different origins. First, for the information to flow upward (to more informed and effective regulators) it is required that public representatives hold high expertise and ethical standards (Marra, 2007). Second, in addition to the expected contradictory pressures within the company, a high degree of managerial "cognitive dissonance" might occur if there is ownership dispersion (which is unlikely in European mixed companies operating at a local level) or a lack of clear and stable objectives (Boardman and Vining, 1989). And third, social output is hard to measure, thereby hindering the assessment regarding the degree of success of this governance model (and, broadly speaking, the factual benchmarking of public, mixed and private companies).

For the reasons stated, mixed companies are more likely to appear when the external environment exerts contradictory pressures (some pushing towards purely public, others

to purely private governance models). Indeed, some empirical research confirms that public authorities prefer this model when both financial constraints and contracting costs are high (Bel and Fageda, 2010). Sometimes, mixed companies are even seen by local governments as a “stand-by solution” or a form of “gradual privatisation” (Bognetti and Robotti, 2007). However, there is a risk that this model is perceived by local decision-makers as a second best alternative, when neither fully public (for financial reasons) nor fully private (for social reasons or unacceptable coordination costs) are feasible.

#### **4. PRACTICAL CONSIDERATIONS**

Typically, the private partners in local iPPPs are, or have ties with, construction companies (this also applies to cPPP arrangements). In the utilities sector, these partners also tend to be large international corporations that are specialised in the field and have great market share; for example, the case of Veolia and RWE in Berliner Wasserbetriebe (a mixed company in charge of water services in Berlin, Oelmann *et al.*, 2009) and Suez in ACEA (a mixed company in charge of water and energy services in Rome, Carrozza, 2010). While public authorities retain some degree of control at the strategic level (by holding the majority of the votes in the shareholders’ meetings and therefore being able to perform their regulatory duties), day-to-day operations are usually carried out by the private partners (Bel and Fageda, 2010).

According to EU legislation, mixed companies (and, quite often, 100 per cent public municipal companies) operate under private commercial law which allows them to have

some flexibility (for instance, regarding human resource management) while precluding them to be treated as in-house management (see European Commission, 2008). However, very often municipal companies (either mixed or public) are not primarily designed to deliver high profits (Cruz and Marques, 2011). In addition, there would be huge political costs if the tariffs of essential services (that are public monopolies) were not set to achieve break-even or even a small surplus. Hence, with this governance model, private investors are usually remunerated through costs (that are diluted in the tariffs charged to customers) and attracted by the perspective of future transactions (or lateral contracts, Brux, 2010). Proceeding in this manner, the company respects the EU rules and avoids taxes on profits. The private partner is paid by the mixed company for the construction and/or maintenance of the required infrastructures and also for the consultancy of its parent company. This situation can lead to the so-called “Averch-Johnson” effect, since the private investors increase profits if the mixed company overinvests (and/or contracts out more services to one of the companies owned by those investors). The intricacy of the payment mechanisms hampers transparency (leading to public distrust) and makes contract management an extremely difficult task.

In practice, there are several aspects that can render this PPP model as sub-optimal. First of all, local governments are frequently tempted to work out some figures (to make the PPP alternative pass the viability tests) and to be overly optimistic when considering aspects such as demand and the quality of assets (to get higher up-front payments when selling the shares). The bidders are asked to develop a business-case where they set the tariffs based on certain conditions of demand, investments, regulatory requirements, etc. However, these tariffs change if some indicators suffer (sometimes small) variations to

what was initially forecasted. Indeed, the complex web of contracts usually identifies multiple situations where the financial and economic equilibrium of the companies must be restored (by reviewing the tariffs). In fact, the internal rate of return (IRR) of the project is always secured and risks are passed to consumers (Marques and Berg, 2011). There are three main reasons for this: (1) local governments are likely to be lured by the amount of the up-front payments and the bid assessment methodology often leads to selecting the most optimistic rather than the best bidder (a phenomenon labelled as the winners' curse, Reeves, 2008); (2) even if the public partner is better informed in a relational arrangement, during renegotiations there is no pressure from competitors and the prices asked by the private partner tend to detach from production costs (Bajari *et al.*, 2006); (3) public authorities have the duty to perform an effective contract monitoring yet, since decision-makers from the public sector are actively involved in the management of the services, local governments have disincentives to apply sanctions against themselves and thus tend to agree with proposals to raise tariffs. Hence, it seems that only apparently local governments are in the driving seat of mixed companies and genuine accountability is lost through fuzzy lines of authority. It is indeed a peculiar governance structure where the public sector is both a "referee" and a "player" (Cruz and Marques, 2012).

The existence of an external regulator can help to avert these problems. Nonetheless, there are no sector-specific regulators for some utility services in several member states (for instance urban transportation, waste management and even water services in Europe). Even in countries with capable regulatory agencies, their powers are somewhat limited since economic regulation can interfere with the local autonomy principles. The

solution to circumvent regulatory capture lies with the definition of strict corporate governance rules that clearly define the scope for action of each partner (OECD, 2010). For instance, Marra (2007) argues that if this is accomplished, mixed companies can undertake higher investments (arguably resulting in higher quality standards) and attain lower running costs than totally public utilities.

One additional drawback of mixed companies relates to the fact that both public and private sector representatives have greater experience and accumulated know-how regarding cPPP arrangements (when compared with the difficulties of crafting an optimal relational agreement). Furthermore, procurement procedures in cPPP agreements bear a greater resemblance to the traditional public procurement. On the other hand, there is a greater number of concessions already operating at the local level and some lessons were learned (e.g. see Regan *et al.*, 2011). In iPPP arrangements, the actors still have a blurred perception of their objectives, roles and proper conduct (Cruz and Marques, 2012).

Finally, one encouraging outcome of partial privatisation that emerges from empirical observation seems to be its positive correlation with the exploitation of economies of scale and scope (Bognetti and Robotti, 2007, Bel and Fageda, 2010). PPP arrangements seem to work as a means that allows for inter-municipal cooperation and mixed companies avoid giving up completely the control of essential utility services.

## **5. CONCLUDING REMARKS**



The use of mixed companies by local governments to deliver urban infrastructure services and its mechanisms of governance remain relatively unknown both to practitioners and academics. To make an informed decision, local politicians should consider the advantages and disadvantages of every available governance structure. Although the “traditional” publicly-owned entities offer greater discretion to municipal executives, the growing need for an efficient management and for models that are able to cope with harsh financial restrictions should lead to “credible contracting modes that possess adaptive attributes located between classical markets and hierarchies” (Williamson, 2002: 181). Nevertheless, local governments must first determine during the viability studies whether the PPP alternative is preferred to in-house delivery and traditional procurement (see figure 2). This is usually carried out through the calculation of a public sector comparator (a benchmark value for the project—typically, the expected cost of in-house delivery), which allows the decision makers to identify the model that provides better value for money (Marques and Berg, 2010).

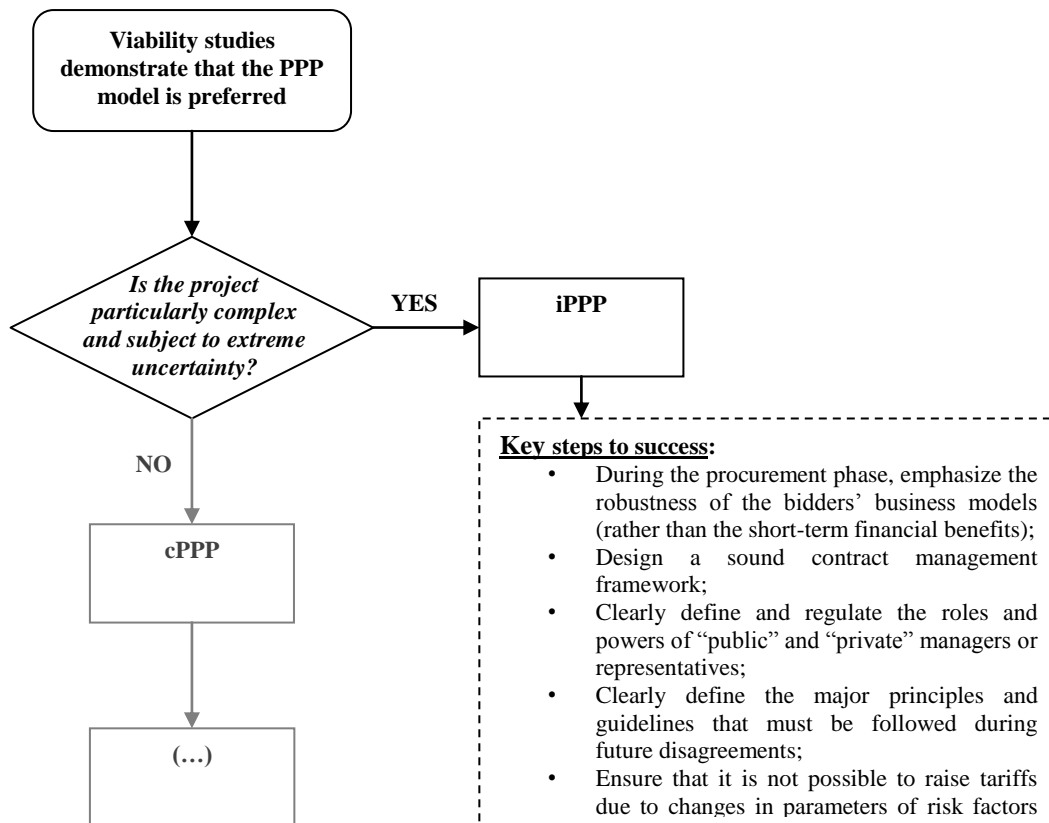
The main differences between cPPP and iPPP models relate to contract management. Mixed companies have a very complex regulatory framework consisting of an endless number of documents (and sometimes an external regulator). The web of contracts of this governance structure sometimes makes the payment mechanisms obscure and the contract management fairly complex. Moreover, in an iPPP, disincentives are created towards the application of sanctions due to failures in the day-to-day management or breaches of contracts. Indeed, the public partner would experience a form of self-punishment (Marques and Berg, 2011). The conflicts of interest appear because local governments assume the role of both regulator and regulatee (Schaeffer and Loveridge,

2002). According to a growing body of literature and also to the insights from practitioners, public sector entities should acknowledge their natural propensity and position themselves as strong and effective regulators—with the responsibility and capability of monitoring the performance of the services rather than producing them (Savas, 2000). Nonetheless, this seems difficult to achieve when the government is actively involved in the management (although we do not consider it unfeasible). In concessions to private companies contract management is necessarily less complex/subjective. On the other hand, it is true that, in this case, the importance of the letter of the (incomplete) PPP contract is amplified and any fluctuations in the assumptions made during the procurement phase can result in the premature renegotiation of the agreement (which is likely to damage the public interest, Guasch, 2004).

Most production risks, such as the ones connected with the design and construction of public infrastructure, as well as commercial risks, such as demand and capacity, should necessarily have a lower economic cost when allocated to the private sector since, at least technically, it is better prepared to manage and mitigate them. This goal can only be achieved if there is an explicit transference of risk to the private partner (Grimsey and Lewis, 2005). As we have seen, this is not by all means a simple task and in mixed companies risks are prone to be transferred to customers (Marques and Berg, 2011).

In fact, as illustrated in figure 2, the use of mixed companies should be confined to cases of extreme uncertainty and complexity associated with the infrastructure services and municipalities in question. In these cases it would make sense to adopt a relational

governance model where, more important than the written contractual clauses, one should underscore the spirit of the contract and a contractual relationship guided by mutual trust, altruism and strategic alliance (Edelenbos and Teisman, 2008). Yet, we do not think that this description fits the majority of the cases in local utilities.



Mixed companies will hardly embody the next *panacea* for local governments' financial hurdles. To provide this model with greater capabilities from the public interest point of view, public authorities should adopt measures to circumvent conflicts of interest (e.g. by educating local decision-makers concerning the proper scope for their action) and

realign priorities (e.g. by diverting weight from the up-front payments towards other aspects such as the robustness of the business models presented by the private partners).

Some authors conclude that this model is often a second best alternative, when neither pure public models that should maximise social output nor pure private models that should maximise cost-efficiency are feasible (Boardman *et al.*, 1986). However, the desire to bundle efficiency and social objectives and find an optimal commitment is praiseworthy. In fact, although only a few early studies have been conducted so far, mixed companies seem to perform well in the Italian water sector (Bognetti and Robotti, 2007, Marra, 2007) where utilities are usually large and vertically integrated (including both retail and wholesale segments of the market). If a large number of contiguous municipalities show interest in exploiting economies of scale, the iPPP model could gain relevance and have greater attractiveness since the larger complexity could increase uncertainty and render transactional contracting inefficient (increasing the completeness of the contract would entail prohibitive transaction costs).

Taking into account what is stated by the literature and the real constraints imposed on local governments, it is reasonable to conclude that mixed companies have some fine theoretical capabilities even if the drawbacks outweigh the benefits in most cases. In the authors' opinion, future research on mixed companies should focus on three main areas: (1) the thorough analysis of real case studies at an international level. This should include the analysis of the regulatory environment, the scrutiny of the procurement procedures and the review of the contract monitoring instruments devised; (2) the performance evaluation of mixed companies in a comparative perspective. Mixed

companies should be compared with other governance models regarding efficiency, effectiveness and other outcomes; (3) the development of a corporate governance framework specially designed for mixed public-private capital companies. The set of rules and policies should be flexible enough to enable a relational long-term agreement and, at the same time, capable of protecting the public interest at all times.

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## **Figure Caption List**

Figure 1 – Typical contractual framework of local mixed companies

Figure 2 – The decision flow leading to the choice of the iPPP model and the key steps to success of mixed companies