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The privatisation of urban water services: theory and empirical evidence in the case of Spain

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ABSTRACT: Following the wave of deregulation and privatisation of public firms that started in Anglo-Saxon economies in the late 1970s, most industrialised countries changed their laws to encourage the contracting out of local services. Accordingly, in 1985 many Spanish municipalities began to privatise their urban water services. However, three decades after the first privatisations took place, and against a backdrop of increasing opposition to new privatisations, several municipalities are now returning to the public provision of these services. In this context, after establishing a theoretical framework for privatisation, this paper goes on to describe the main features of the process of privatisation of urban water services in Spain, as well as recent trends towards remunicipalisation. With no clear empirical evidence as to whether public or private management of urban water services is better, this ongoing debate is set to continue and will be strongly influenced by prevailing ideological trends as well as other environmental factors.

JEL Classification: H76; L33; L95.

Keywords: Urban water services; privatisation; remunicipalisation; Spain.

La privatización del servicio urbano de agua: teoría y evidencia empírica en el caso de España

RESUMEN: Como consecuencia de la ola de desregulación y privatización de empresas públicas que se inició en las economías anglosajonas a finales de los años setenta, muchos países industrializados cambiaron su legislación para permitir la externalización de los servicios locales. Así, a partir de 1985 muchos municipios españoles comenzaron a privatizar el servicio urbano de agua. Sin embargo, tres décadas después de las primeras privatizaciones, en un entorno de creciente oposición a nuevas privatizaciones, algunos municipios están volviendo a la prestación pública del servicio. En este contexto, después de establecer un marco teórico para

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la privatización, este artículo describe las principales características del proceso de privatización del servicio urbano de agua en España, así como las recientes tendencias hacia la remunicipalización. En ausencia de una evidencia empírica concluyente acerca de la superioridad de la gestión pública o privada de los servicios urbanos de agua, el debate continuará fuertemente condicionado por las tendencias ideológicas prevalecientes y otros factores del entorno.

Clasificación JEL: H76; L33; L95.

Palabras clave: Servicio urbano de agua; privatización; remunicipalización; España.

1. Introduction

From the late 1970s onwards, many governments in developed countries have deregulated and privatised a host of economic activities. The origin of such changes dates back to the 1960s, when there was a growing sense that the market failures which public intervention aimed to correct were actually worsening. The first large-scale privatisation programme was launched in the early 1980s by the first Thatcher government in the United Kingdom, and privatisation rapidly spread worldwide. Although liberalisation and privatisation have commonly been associated with large industries operating at national level, including air transport, financial services or telecommunications, they have also affected local services such as refuse collection, urban transport or urban water services which show an increasing proportion of private provision.

The privatisation of urban water services has probably generated more controversy than with any other type of local services. Up to certain consumption levels, water shares some of the features of merit goods. This fact, in addition to the way the water industry is organised around local natural monopolies, has been used as the basis for arguments that seek to deter the privatisation of the service or, at least, to advise extreme caution when doing so (Littlechild, 1988). In this regard, legislation in some developed countries does not allow for the privatisation of urban water services (OECD, 2004), while other countries such as the Netherlands and Uruguay have even safeguarded national regulations to ensure public provision (Marques, 2010). Furthermore, in recent years a number of municipalities in developed countries, including prominent cities such as Paris and Berlin, have been remunicipalising urban water services (Hall *et al.*, 2013). At the same time, growing opposition to new privatisations is emerging from certain left-leaning political parties and citizens' movements (Lobina *et al.*, 2011; Mazzoni & Cicognani, 2013; Fattori, 2013). Some authors have gone so far as to declare that the trend towards remunicipalisation is a global one (Lobina *et al.*, 2014).

The aim of this paper is to analyse the main features of the process of privatisation of Spanish urban water services starting in 1985, when the *Ley 7/1985 de Bases de Régimen Local* (*Local Government Regulatory Law*) developed the legal frame-

work for the contracting out of local services. From this date onwards, many Spanish municipalities opted to privatise the provision of urban water services, thus joining the few cities that had already privatised these services in the late 19th century (Matés Barco, 1999; Ruiz-Villaverde *et al.*, 2010). However, as in other developed countries, a debate has emerged in Spain as to how urban water services should be managed. At the same time, a number of municipalities are returning to public provision and there is also growing citizens' opposition to new privatisations (González-Gómez *et al.*, 2014).

Following this Introduction, Section 2 reviews the theoretical arguments that support the decision to privatise urban water services. Section 3 describes the main features of the process of privatisation of these services in Spain, and characterises the current structure of the Spanish water industry. Section 4 explains the recently observed trends towards remunicipalisation and reviews the main arguments against new privatisations. The final section presents the conclusions.

2. Theoretical framework: arguments in favour of privatisation

2.1. Public interest theories *versus* private interest theories

The substantial government intervention in the economy that took place in many industrialised countries for much of the 20th century was based on the so-called *Public Interest Theory* (Pigou, 1932), which holds that when the market is incapable of ensuring efficient allocation of resources, the State must intervene in order to correct these market failures. One of the principal forms of intervention is by means of public companies. This is the case in the water industry, a paradigmatic example of a natural monopoly, with high sunk costs due to investment and maintenance, high asset specificity and significant health externalities associated with service provision.

The second half of the last century, however, saw the emergence of some theoretical perspectives critical of government intervention in the economy. Specifically, the *Virginia School*, exemplified by the American economist and Nobel laureate, James Buchanan, and the *Chicago School*, led by George Stigler and Milton Friedman, produced theses which influenced the development of the so-called *Positive Economic Theory of Regulation*. Although its reach was initially somewhat limited, from the 1970s onwards these schools of thought began to exert significant influence in academic and political spheres. Proof of this is that from the 1980s, many industrialised countries started to question the results of government intervention in the economy and to undertake significant processes of liberalisation and privatisation. Market deregulation and privatisation of public enterprises were more evident in large, national industries, but could also be observed to a lesser extent at the level of local public services provision.

The theoretical foundation that provides the basis for *private interest theories* lies in using the tools of the neoclassical economic theory to analyse the political

system. In analytical terms, the market exchange system is replaced by the non-market exchange system, or in other words, the political system. The basic contention of these schools of thought is that, in practice, intervention does not pursue public interest goals but rather seeks to satisfy private and political interests, potentially resulting in a bloated public sector, a surplus of public services and highly inefficient management. The solution to such problems could be found in the promotion, private management and the introduction of competition in the management of public services (Savas, 1987). Thus, when the monopoly of public services is removed from politicians and bureaucrats, outsourcing via tendering processes presents itself as a cost reduction solution (Niskanen, 1971). In addition, privatisation is a useful tool for aggregating demand, especially in the case of smaller municipalities, thus achieving a more efficient scale of production (Donahue, 1989).

2.2. The Microeconomic Theory of Bureaucracy

The *Microeconomic Theory of Bureaucracy* can be considered the benchmark theoretical framework for analysing the origin and nature of inefficiency in public administration. It has also provided a theoretical basis for empirical studies analysing differences in efficiency between public and private companies. According to Niskanen (1994, p. 15), there are two features worth noting about the basic units of public management, i.e., bureaucratic agencies. Firstly, the owners and employees do not extract profits from the company in the form of personal income. Secondly, a significant portion of their revenue comes from sources other than the sale of the relevant product or service. Furthermore, bureaucratic agencies are publicly funded and offer a product or service that is often difficult to quantify or even to define, meaning that financers do not have complete information about the budget required for the service provision.

In view of these characteristics and given the lack of competition, cost control would not appear to be essential to the survival of public management units. Similarly, the difficulty in quantifying the output creates a significant information asymmetry between the manager of the bureaucratic organisation and the financer. As a result, it is difficult for the financer to effectively monitor the organisations' activity and expenses. In such a situation, the managers of bureaucratic organisations have little incentive to act efficiently, at the same time as enjoying considerable discretion when it comes to pursuing other objectives [1]. Consequently, the microeconomic models addressing the study of public management units have replaced the traditional neoclassical profit maximisation objective with alternative objectives, such as maximising the utility of the bureaucrats.

[1] Such a divergence of objectives can result in so-called *X-inefficiency* (Leibenstein, 1966), which arises from the difference between the optimum effort which would minimise costs and the level of effort that managers and employees of public companies actually make, depending on their motivation and objectives.

Accordingly, within the context of this theoretical approach, the last quarter of the 20th century witnessed the emergence of privatisation as a solution to the problems of intervention and a way of promoting more efficient public services management. In addition, privatisation has become an oft-used alternative for solving the problems of financial restrictions that local public institutions in many developed countries have had to face.

2.3. Transaction costs and property rights: Partial privatisation

The concept of *transaction costs* was implicitly introduced in the seminal work of British economist and Nobel laureate, Ronald Coase (Coase, 1937), where the company is no longer regarded as a technological production function but rather an organisation with a governance structure that can take various forms. Within this approach, the unit responsible for managing the public service weighs up the decision to *make or buy*, in which factors such as the order of transactions, their cost or the supervision and control of the provision play a crucial role. In other words, if the privatisation of urban water services management aims, ultimately, to save costs, it is essential to take into account not only production costs but also transaction costs.

Similarly, the *Incomplete Contract Theory* provides a useful theoretical framework for understanding the range of different ways of outsourcing or privatising public services. Within this approach, the influence of *property rights* is key to understanding the role of the functioning of bureaucratic organisations, incentives, management efficiency and even quality in service delivery. Since the late 1990s, partial privatisation has become an increasingly significant way of managing local public services, especially urban water services. Public-private companies provide an alternative organisational approach to the traditional dichotomy between a purely public or purely private provision of services. In this management model, the private partner performs the day-to-day management operations, while the local government maintains a degree of control over the private partner.

A number of authors have put forward different arguments for the joint management of local services (Matsumura, 2003; Bel & Fageda, 2010). Such a management formula would help reduce monitoring costs since local governments can exert direct control via their ownership rights over the supplier company, in addition to those rights conferred by the regulatory framework. Even in cases where the company manages the service independently of the local government, the latter maintains its say in regard to the overall objectives. In addition, local government involvement in the supplier company board of directors helps to reduce problems associated with long-term incomplete contracts. Finally, it is worth adding that partial privatisation may encourage greater cost reductions than with purely public management, while also promoting improved service quality compared to purely private management (Schmitz, 2000)[2].

[2] In this regard, it should be noted that private managers of public services have a strong incentive to reduce costs, potentially at the expense of service quality (Hart *et al.*, 1997).

3. The privatisation of urban water services in Spain

3.1. Current situation of the Spanish water industry

The emergence of private companies in the Spanish water industry dates back to the end of the 19th century. Although there were periods throughout the 20th century that witnessed the privatisation of urban water services in some Spanish cities (Mates Barco, 1999; Ruiz-Villaverde *et al.*, 2010), the current map of privatisation dates from the mid-1980s when, under *Ley 7/1985 de Bases de Régimen Local* (*Local Government Regulatory Law*), many municipalities chose to relinquish water services management to private companies.

Several features of the legal framework regulating the privatisation of water services in Spain are worth highlighting. First, local policymakers are empowered to choose between managing urban water services directly or outsourcing management. Furthermore, only the management of the services can be outsourced; the infrastructure always remains public property. Secondly, the legal form usually chosen for the transfer of water services to a private company is concession, rather than other less common methods set out in the regulations, such as lease or an agreement with an individual or legal entity. Thirdly, water services management is transferred to a private company for a certain period of time, via a public tendering process. There is a limit of 50 years for contracts involving infrastructure construction as well as operating the service, and 25 years for transfer of service operation only. The type of auction is a best offer, sealed bid. Lastly, Spanish legislation accounts for a possible partial privatisation of urban water services management. In this management model, private companies usually acquire a 49%-stake in the municipal company supplying the service and assume responsibility for daily management, while the local government maintains direct control over the company's medium- and long-term decisions.

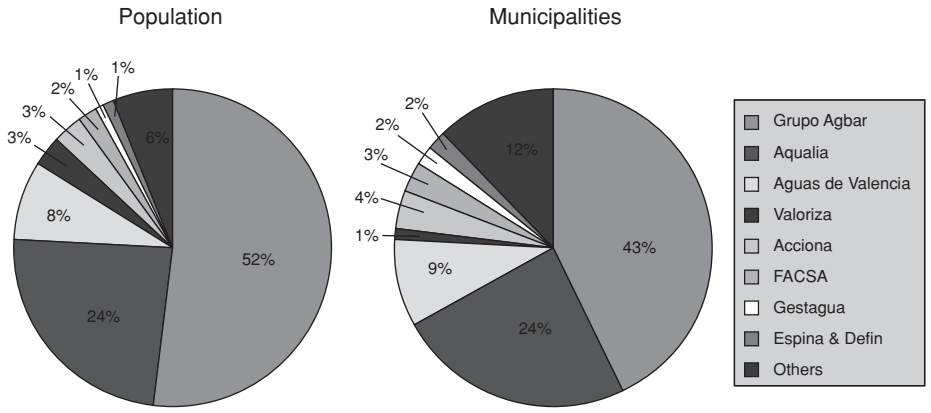
Today, Spain is one of the developed countries with the greatest number of private companies involved in the management of urban water services (Pérard, 2009); according to González-Gómez *et al.* (2014), 23% of Spanish municipalities have private capital invested in the management of these services, a percentage that rises to 55% when expressed in terms of the population served[3]. The Spanish water industry is oligopolistic in that it is strongly concentrated around two major business groups, namely *Aguas de Barcelona*, a subsidiary of *Suez Environment*, which operates under different names in different Spanish regions[4], and *Aqualia*, part of the *Fomento de Construcciones y Contratas* group. These two companies together are responsible for

[3] These figures indicate that there is a greater presence of private companies in medium-sized and large municipalities.

[4] These different company names are *Aigües de Barcelona* in the metropolitan area of Barcelona; *Aquanex* in Extremadura; *Aquara* in Aragon; *Aquarbe* in Cantabria, the Basque Country and Rioja; *Aquaona* in Castile-La Mancha as well as Castile-Leon; *Asturagua* in Asturias; *Canaragua* in the Canary Islands; *Hidralia* in Andalusia; *Hidraqua* in the Valencian Community; *Hidrobal* in the Balearic Islands; *Hidrogea* in Murcia; *Sorea* in Catalonia, except in the metropolitan area of Barcelona; and, lastly, *Viaqua* in Galicia.

providing urban water services to around 75% of the population resident in Spanish municipalities which have private companies involved in urban water services management. Other companies that operate throughout Spain, albeit on a smaller scale, include *Acciona*, *Agua y Gestión*, *Gestagua*, *Hidrogestión*, *Urbaser* and *Valoriza*. Lastly, some companies have a markedly regional scope, for example *Aguas de Valencia*, *FACSA* and *Espina & Delfín* (Figure 1).

Figure 1. Participation of private urban water services management, 2014.



Source: Own elaboration.

3.2. Factors explaining the decision to privatise: Empirical findings

According to recent literature (see Bel & Fageda, 2007; 2009), the factors commonly considered in empirical analyses to explain the privatisation of urban water services can be grouped into three main categories: fiscal restrictions; cost reduction and efficiency gains; and political processes and ideological attitudes.

Concerning fiscal restrictions, political instability and the economic crisis and inflation of the late 1970s eventually led to a major tax reform in Spain, targeted at reducing public debt and curbing inflation. This new scenario placed major constraints on government subsidies to municipalities and city councils were subjected to two important financial restrictions. On one hand, they had a limited capacity to generate their own resources and, on the other, received drastically reduced government subsidies for maintaining and improving the water supply. Hence, many city councils needed to set the price of urban water services closer to its real cost; otherwise, simply maintaining the service would have significantly destabilised municipal budgets. From that time onwards, local politicians began to reconsider outsourcing the management of water services as an attractive low-cost alternative to a direct policy of raising water rates (Bel & Miralles, 2003).

Furthermore, as postulated by *private interest theories*, introducing competition through tenders and auctions to award the running of urban water services was also

seen as a strategy aimed at achieving efficiency gains. Moreover, as noted in Section 2, since the optimal scale in the urban water supply tends to be greater than that of the municipal district, contracting out also became a useful strategy to achieve the optimal operational scale by aggregating demands.

Finally, regarding political processes and ideological attitudes, local politicians do not make choices concerning the management of public services based solely on economic grounds. Instead, the *citizen-candidate* approach (Osborne & Slivinski, 1996) maintains that motivations underlying policy decisions in a democratic system also include two other important factors: political interest, understood as the priority of winning elections and gaining access to or remaining in power; and preference for a series of policies over others in accordance with politicians' ideology. In this sense, if a politician pursues electoral success, the pressure from lobbies or interest groups may be an important factor in the decision-making process. Hence, in municipalities where trade union membership is high, direct management or outsourcing to a public company is expected to be the most popular choice for water management. In contrast, in municipalities with influential business groups, other privatisation options will be probably more prevalent. Furthermore, right-wing political parties would be expected to promote the outsourcing of urban water services to private utilities, while left-wing parties would tend to opt for direct management or delegating management to a public firm.

Several empirical studies have examined the importance of all the abovementioned factors in the privatisation of urban water services in Spain, including González-Gómez & Guardiola (2009), Miralles (2009), Bel *et al.* (2010), González-Gómez *et al.* (2011), and Picazo-Tadeo *et al.* (2012). Although generalisations about the factors that explain the decision to privatise urban water services should be drawn carefully, the abovementioned empirical studies lead to a couple of relevant conclusions for the Spanish case. On the one hand, all models estimated, mostly based on probit and logit techniques, have low statistical explanatory power, which points to the complexity of capturing the nature of the privatisation decision. On the other hand, it is found that pragmatic reasons, i.e., fiscal restrictions, cost reduction and efficiency gains, better explain the decision to privatise urban water services than ideological or political ones. The only exception to these findings is the paper by Picazo-Tadeo *et al.* (2012), which shows that when ideology and political motivations are introduced into the models through variables that go beyond the mere distinction between right- and left-wing parties, they might well have a greater influence on local governments' decisions than existing research suggests.

4. Rethinking the privatisation of water services: A new paradigm?

After almost three decades since the wave of privatisation began in many developed countries, and without any conclusive evidence as to the superiority of private management of urban water services, the option to privatise is being revisited in

many cases. This has seen the emergence of arguments that, in general, question the privatisation of public services, at the same time as some municipalities return to a public provision of urban water services and opposition movements arise in other municipalities, in response to new announcements of privatisation. These issues are analysed below, with a particular focus on the situation in Spain.

4.1. Arguments against privatisation of water services

4.1.1. The impact of privatisation on water prices

The water industry is structured around natural local monopolies that leave little margin for competition; consequently, it has been argued that private enterprise could take advantage of this monopoly status to raise the price of water. However, it can also be argued that efficiency gains and the consequent cost reduction associated with private management should allow for the possibility of price reduction. The ultimate effect of privatisation on the price of water, therefore, would remain uncertain. Empirical evidence can shed some light on this issue.

Empirical studies focusing on Spain suggest that cities with private management of water services charge higher rates than municipalities with public provision, despite the lack of concrete factors that might justify such a difference, such as cost differences linked to resource sources or different levels of water stress (Martínez-Espiñeira *et al.*, 2009; 2012)[5]. Some authors have argued that this fact could be related to the absence in Spain of independent agencies to regulate and monitor water companies' activities, as OFWAT does in England and Wales. However, empirical evidence in these countries is similar to that found in Spain and suggests that privatisation there has also led to an increase in water prices (Lobina & Hall, 2001; Dore *et al.*, 2004).

4.1.2. Cost savings

Generally speaking, in line with *private interest theories*, it can be seen that in many sectors of economic activity, regulation leads to the emergence of productive inefficiencies and that the creation of competitive markets through deregulation or privatisation can provide significant incentives to reduce costs and improve efficiency. However, in the case of the water industry the potential cost savings derived from privatisation could be questionable for several reasons. Firstly, it is an economic activity where it can be difficult to introduce real competition into the tendering pro-

[5] However, in the particular case of the Spanish region of Andalusia, García-Valiñas *et al.* (2012) find, firstly, that water prices are lower when the local council is responsible for service management, rather than outsourcing the service in some way. And, secondly, taking only cases of outsourcing into account, they find that public companies set higher prices than private and public-private companies. This is because the public company sets higher prices for the fixed part of the rate.

cess; at best, the result of these processes are quasi-markets, with a limited number of bidders (Bel & Warner, 2008). In this regard, there is empirical evidence from Spain which shows that greater market concentration in the private segment of the industry leads to higher water rates (Bel *et al*., 2015).

Secondly, it is to be expected that under the principle of profit maximisation, private companies tend to prioritise profit at the expense of the quality of urban water services. Consequently, there is a need to monitor the performance of private companies, although this is typically very costly. Thirdly, and closely related to the previous point, there are transaction costs related to implementing private operator contracts, i.e., costs associated with information asymmetry, management and monitoring of contracts, which may even exceed the costs of direct management of urban water services. Lastly, it is also questionable whether privatisation is the only way to take advantage of economies of scale in the water industry; in this regard, Bel & Fageda (2007) argue that the optimal scale of production of urban water services can also be achieved through public management by means of interadministrative cooperation, i.e., consortia or associations of municipalities for service provision.

Furthermore, the available empirical evidence on the relationship between efficiency and the type of urban water services management is inconclusive (González-Gómez & García-Rubio, 2008; Bel & Warner, 2008; Abbott & Cohen, 2009; Picazo-Tadeo *et al*., 2009; Bel *et al*., 2010; Suárez-Varela, 2015). Although some empirical studies do find private companies to be more efficient than their public equivalents, this may be due to the greater tendency of public companies to operate in less favourable conditions and higher scale and scope diseconomies (Carvalho *et al.*, 2012.); in other words, it would seem logical that private companies avoid set-ups with lower expected returns (González-Gómez *et al.,* 2011). In the context of Spain, Picazo-Tadeo *et al.* (2009) find significant differences in the technical efficiency of water companies according to the characteristics of the environment in which they operate. They therefore suggest that these characteristics should be taken into account when measuring efficiency in the water industry (see Picazo-Tadeo *et al.,* 2009).

4.1.3. Decline in quality

There are a number of empirical studies highlighting the improvements in the quality of urban water services after privatisation, principally in less developed areas. Marin (2009) provides empirical evidence of improved quality, including greater continuity and a reduction in supply disruptions, following the introduction of private capital in the water industry in countries such as Colombia. Similarly, Galiani *et al.* (2005) studies the privatisation process in Argentina, concluding that it has led to improved water quality as well as better access to services in the poorest areas of the country.

Nevertheless, from a theoretical standpoint, it has also been argued that, given the principle of profit maximisation to which private enterprises adhere, it is hard to believe that privatisation would result in improvements in some aspects of water

service quality, for example those relating to environmental issues, such as respecting ecological water levels, protecting riverbanks, and reducing water losses throughout distribution networks. Along these lines, there is empirical evidence from the UK of a deterioration in the quality of urban water services following privatisation (Lobina & Hall, 2001; Dore *et al.*, 2004). Lobina & Hall (2000) find that privatisation in the British city of York, as well as in Tucumán and Buenos Aires in Argentina, was followed by a deterioration in service quality in such aspects as supply continuity and leakage control. According to Lobina *et al.* (2014), many private companies fail to comply with certain terms of their contracts, and this has a number of negative effects on service provision including worsening performance, investment levels below those agreed in the contract, workforce cuts or hindering the monitoring of the activity.

With respect to Spain, Picazo-Tadeo *et al.* (2008) estimate the efficiency of a group of water companies located in the region of Andalusia, taking service quality as an additional output, measured by the volume of water losses throughout the distribution network. Their principal finding is that delivering quality, i.e., reducing water losses, entails a significant opportunity cost. Consequently, omitting this variable from the efficiency analysis means that the efficiency of the companies that produce more quality may be skewed downwards (see also Sáez-Fernández *et al.*, 2011).

4.1.4. Partial privatisation as a solution

As noted, joint management of urban water services provision might provide a way of combining the advantages of public management, e.g., upholding service quality and other social objectives, with those of private management, e.g., greater efficiency and reduced production costs, while also reducing the transaction and monitoring costs associated with purely private management. However, there does not seem to be any academic consensus as to the superiority of joint management of public services over other types of management.

From a theoretical viewpoint, Eckel & Vining (1985) argue that joint management, far from being the best solution for the provision of public services, can adopt the worst faults of public and private management. In other words, these companies do not usually achieve the private company's goal of profit maximisation, nor do they fully uphold social interest. In this regard, for the internal control of a public-private water company to be effective, the public representatives need to be highly experienced in this business area and also to maintain high ethical standards (Marra, 2007). Along these lines, Boardman & Vining (1989) note that mixed companies often have ill-defined objectives insofar as there are conflicting pressures generated by the coexistence of private and public interests within the same management unit.

Taking an empirical perspective, Ferreira & Marques (2012) analyse four case studies in Portugal and conclude that the ostensible theoretical advantages of the partial privatisation of local public services are little apparent in reality, especially in terms of upholding social interests. In this regard, the authors argue that the empirical evidence shows that it is very difficult to satisfy two opposing types of interests with

one type of joint management, and that, in practice, the private investor's interests typically prevail over citizens' interests.

4.2. Remunicipalisation and opposition to new privatisations

4.2.1. The United States: theoretical paradigm shift?

The American historian and sociologist Mildred Warner (Warner, 2008) maintains that in order for the wave of privatisations of the last quarter of the 20th century to take place, it needed a prior theoretical paradigm shift influenced, as noted, by the *Virginia* and *Chicago Schools*. She also suggests that the privatisation momentum may have peaked and notes that in many developed countries we are starting to see cases of remunicipalisation of local services management, meaning a return to public management of a service that had previously been privatised. In the particular case of the US, according to this author, privatisation peaked in 1997 and today there are now more instances of remunicipalisation than new cases of outsourcing.

One might wonder, then, if prior to this observed change in the trend, a new theoretical paradigm shift took place. The answer is that it most likely did, and *Social Choice Theory* provides an explanation of that shift (Hefetz & Warner, 2007; Ruiz Villaverde *et al.*, 2013). This theory is based on the importance of deliberation, especially in situations where there are significant conflicts of interests; accordingly, it proposes repeated processes of dialogue, which combine elements of markets and planning as a way of achieving optimal solutions to social problems. Recognising the potential market solutions, policymakers need debate and dialogue in order to respond to the diversity of interests and possible conflicts. The main challenge of this theory is creating the right context in order to take into account citizens' opinions while developing the political capacity to detect possible differences of interest and identify solutions that do not divide the community (Nalbandian, 2005).

4.2.2. Remunicipalisation and opposition to new announcements of privatisation

The most recent and also the best-known cases of remunicipalisation of urban water services in Europe occurred in Paris and Berlin. Despite the fact that the modernisation and development of urban water services in many European cities can be accredited to the investment and management skills of private enterprise, in many cases the results did not live up to expectations. As a result, in the final quarter of the 20th century, doubts began to arise about the efficacy of privatisation, and these were soon followed by the first instances of remunicipalisation, as was the case in Spain (Ruiz-Villaverde *et al.* 2010)[6].

[6] In some major European cities, however, the debate arose many years earlier. Following the first cases of privatisation in the city of London, British economist John Stuart Mill was already warning about the importance of publicly managing certain local services such as the supply of urban water.

Of the papers published on the causes of the current move towards the remunicipalisation of urban water services, of particular note is that of Pigeon *et al.* (2012), which carries out a series of case studies with a comparative international perspective. Specifically, the authors studied the case of Paris in Europe, Dar es Salaam in Africa, Buenos Aires in Latin America, Hamilton in North America and, lastly, Malaysia in Asia. The primary conclusion is that, with the exception of Paris, remunicipalisation occurred in response to the failure of the earlier privatisation. Paris was the only city to boast an effective and profitable private management of the urban water services; why then did they go ahead with remunicipalisation? Since their privatisation in 1860, the urban water services of the French capital had been managed by two of the most influential private companies in the world, namely *Veolia* and *Suez*. Both companies achieved such high levels of influence and power in the political arena that they were able to earn huge private revenues from managing the services. The problem, however, arose when it was uncovered that as part of their corporate strategy, these companies were putting their short-term private benefits ahead of the long-term sustainable management of the service; in other words, *Veolia* and *Suez* prioritised a selective and lucrative water supply over the criterion of a universal provision of services and sustainability.

In addition to the cases of remunicipalisation, there has been a notable increase in citizen opposition to the announcements of new privatisations of urban water services. This is exemplified in the case of Italy, which in 2009 witnessed the birth of the *Forum Italiano dei movimenti per l'acqua*, a social movement that was in opposition to the water privatisation project initiated by the government at the time. The movement's first success was a Constitutional Court ruling in favour of conducting a national referendum on the privatisation of water services (Corte Costituzionale, sentenza 29/2011). In the referendum, which included two other topics of interest to Italian citizens, 95% of participants voted against the privatisation of water services. On 7th June 2011, the Italian Constitutional Court upheld the claim and the privatisation project undertaken by the government was defeated (Corte Costituzionale, sentenza 174/2011).

A more recent case, but philosophically very similar, occurred in the Greek city of Salonika, when on 18 May 2014, a local referendum was held to determine how urban water services were to be managed. In response to the question «*Do you agree or not with the privatisation of EYATH*?»[7], 98% of those taking part in the referendum answered *«no»*. The coordinated mobilisation of citizens, primarily by the *European Federation of Public Service Unions* (EPSU), played an important role in this outcome. In recent years, we have also seen the emergence of other social movements against the privatisation of water services, but this time operating at a European level, e.g., *The European Water Movement*, comprising different work groups that act as lobbyists in the European Parliament, or the *Right2water* campaign that promotes the provision of water and sanitation as essential public services in Europe.

[7] EYATH is the acronym of *Thessaloniki Water Supply & Sewerage Co.*, a public corporation that provides water supply and sewerage services to more than 1.2 million residents in the metropolitan area of Salonika.

As in other European countries, there have been cases of the remunicipalisation of urban water services in Spain; some examples are the municipalities of Arenys de Munt (Catalonia), Arteixo (Galicia), Ermua (Basque Country), Totana (Murcia), Torrelavega (Cantabria), or Alhaurín de la Torre, La Línea de la Concepción, Lucena, Medina Sidonia and Torredelcampo in Andalusia. Furthermore, the water supply services of some associations of municipalities, such as *Aguas del Huesna* in the province of Seville, or the *Mancomunidad de la Sierra de Cádiz*, have been brought back under public control. In most cases, remunicipalisation occurred once the concession contracts that were signed under the *Local Government Regulatory Law* (*Ley de Bases del Régimen Local*) of 1985, usually with a term of 25 years, had expired; in other cases, the contracts were either rescinded by mutual accord by the local council and the water supply company, or by a court decision following litigation by local authorities against the private company for non-compliance of their contractual duties and obligations[8]. Irrespective of how remunicipalisation occurred, the overriding rationale behind the return to the public provision of services was the same: improvements in quality, the need for investments in conserving and maintaining infrastructures and guaranteeing the universal provisions of water services.

At the same time in Spain, there has been an increase in opposition movements to new initiatives to privatise urban water supply services, backed by certain political parties and citizen platforms. One of the best examples is the case of Madrid, where the announcement of the partial privatisation of urban water services was met by a citizen opposition movement. This movement was fronted by the so-called «*Plataforma contra la privatización del Canal de Isabel II*», comprising a number of social organisations including neighbourhood associations, sections of major Spanish national unions, political parties and individual citizens. The movement has held some notable events including several marches and demonstrations against privatisation as well as taking their case before the Constitutional Court in March 2012 alleging that the decision was unconstitutional. The movement's greatest impact came when an informal consultation was carried out asking citizens about their preferences regarding the ownership of water service management in Madrid; an overwhelming majority of the participants came out in favour of continuing with public provision.

5. Concluding remarks

Since the mid-1980s, and against the backdrop of a widespread wave of economic deregulation, many developed countries privatised their urban water services. However, given the particular characteristics of the water industry, namely, local natural monopolies, high sunk costs, positive externalities associated with service pro-

[8] There have also been, in certain municipalities, attempts to return to the public provision of urban water services before the privatisation contracts have even come to term. For the most part, these proposals are being presented by left-wing political organisations such as *Izquierda Unida* (IU), although in certain cases, such as in the city of Murcia, the movement enjoys the support of other political groups such as *Unión Progreso y Democracia* (UPyD), a moderate socio-liberal political party.

vision, a debate has opened about which is the most suitable form, public or private, for the supply of this natural resource. The controversy has gone far beyond academic and political circles and affects society as a whole.

From a theoretical standpoint, the debate is not conclusive. The *Public Interest Theory,* based on the idea of *market failures,* highlights the peculiarities of the water industry and sides with public corporations as the best solution for the supply of water services. *Private interest theories,* however, maintain that the public provision of services leads to inefficiencies and argue that generating competition amongst private operators is the best way to encourage a more effective and efficient management of urban water services, as well as cost reduction. Both approaches nevertheless have certain shortcomings when it comes to explaining the complexities of the water industry. Thus, if we can overcome the dichotomy of market *versus* state, the idea of joint management emerges within the framework of the *industrial organization*, providing an intermediate formula that allows the combination of the benefits of private and public management. Said formula also has its detractors who underline the difficulties in reconciling private interests with the aims of the public provision of services within the same management unit.

Given the lack of a theoretical consensus, researchers have tried to provide empirical evidence to determine which management model of urban water services is both more efficient and more in keeping with public interest. However, the results of the applied research do not lead to an unequivocal conclusion. In this regard, the characteristics of the environment in which companies operate and the government regulations they are subject to appear to be the determining factors of management efficiency, whether public, private or joint.

With the theoretical debate ongoing and the results of applied research inconclusive, in recent years there has been a trend of returning to the public provision of urban water services, even in such prominent cities as Paris and Berlin. Some authors maintain that one possible explanation behind this tendency is a theoretical paradigm shift based in the *Social Choice Theory*, which highlights the need to combine market solutions with social dialogue and debate in order to find the best solution where conflicts of interest exist between social agents. Irrespective of whether or not there has been a theoretical paradigm shift, many cities have seen a rise in opposition movements when faced with new announcements of privatisation, and which call for citizen involvement when making decisions about water management.

The trend is also true of Spain where, since the second half of the last decade of the 2000s, a number of municipalities have decided to return to publicly managed urban water services, while new announcements of privatisation are met with citizen opposition movements. Nevertheless, as with the other developed countries, some time must be allowed to pass before the true extent of such trends can be evaluated. In any event, in Spain the balance will probably be determined by two primary circumstances. The first is the limited development, compared to other democratic societies, of citizen involvement in political decision-making, which diminishes the influence that citizens' opinions might have on the decision-making process concerning the

management of urban water services. Secondly, the fragile financial situation of the vast majority of Spanish municipalities, in the midst of an economic crisis, together with a local financing model that provides little autonomy to local governments, means that for many local councils, privatisation currently continues to be the easiest and most direct way to generate additional revenue to help to meet their financial commitments.

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