

## THE 'SOCIAL CHOICE' OF PRIVATISING URBAN WATER SERVICES IN MADRID (SPAIN)

Alberto Ruiz-Villaverde<sup>1,\*</sup>, Andrés J Picazo-Tadeo<sup>2</sup> and  
Francisco González-Gómez, Francisco<sup>1</sup>

<sup>1</sup> Universidad de Granada, Departamento de Economía Aplicada,  
Campus de Cartuja, s/n, 18071 GRANADA (Spain).

<sup>2</sup> Universidad de Valencia, Departamento de Economía Aplicada II,  
Campus de Tarongers, 46022 VALENCIA (Spain).

\* Corresponding author; email [albertorv@ugr.es](mailto:albertorv@ugr.es); tel. ++ 34 958 244 046

**SUMMARY** - *In some countries, the law allows private participation in the management of urban water services. Usually, local governments cite different reasons of interest to the general public to allow private companies to operate in the water industry. These kinds of decisions, however, often provoke intense political debate and are at times opposed by citizens. This paper intends to apply an analytical tool that can incorporate objectivity into the decision-making process. More specifically, the Analytic Hierarchy Process (AHP) is proposed in order to analyse the decision-making process in complex situations where different criteria must be taken into account. Such is the case of the choice of urban water service management. In order to illustrate this proposal, the recent decision to partially privatise water services management initiated by the Regional Government of Madrid is taken as an example. This study introduces the debate over the suitability of the type of management of urban water services, reviews the theoretical framework and describes the data analysis technique employed.*

**JEL Classification:** C61 - H83 - L33.

### 1. INTRODUCTION

Internationally, there is great diversity in choice in regard to the type of management - public or private - of urban water services (Perard, 2009). In comparison to other industries, participation by private companies is low. Currently, only five countries' water services are provided by private companies to more than half of the population, namely, Chile, Czech Republic, France, Malaysia and the UK. In countries such as Italy, Spain or Germany, private companies provide water services to 30 - 50% of the population, while in Austria, Belgium and Canada, among others, there is little or no private participation.

The water industry has some particular characteristics, which can explain the low level of participation of private companies. It should be noted that water services are considered a merit good and universal access must be guaranteed, mainly due to the positive externalities this creates. Moreover, it is very difficult to incorpo-

rate competition into the water industry. These factors result in the water industry being sensitive to public regulation and political control. In fact, some countries will not contemplate the legal possibility of private companies becoming involved in management processes. In the countries where this option is available, local governments should be aware that the decision to privatise water services may have implications in very important management aspects, such as access, efficiency and service quality. In this sense, some authors have warned of privatisation cases being linked to problems with contract performance, accessibility and service under provision, increases in prices and decreases in quality (Lobina, 2005; Pierce, 2012).

Since the 1970's, empirical research has attempted to explain why some local governments chose to privatise urban water service management. When the economic climate is unfavourable, privatisation appears to be a logical move in those countries where the law permits this possibility. Most studies have based their analysis on multivariate regression techniques, mainly *probit and logit* models (Bel & Fageda, 2009; Picazo et al, 2012). The explanatory variables taken into account are usually placed into three groups: (1) fiscal constraints; (2) economic efficiency; and (3) political processes and ideological attitudes. In recent reviews of the literature, Bel & Fageda (2007, 2009) found that policymakers often make decisions for pragmatic reasons rather than ideological or political reasons. In any case, it should be noted that these types of studies have limited explanatory power due to methodological difficulties in capturing the natural dynamics of decisions made by local governments. Consequently, we must be careful when generalising about the factors which explain these decision-making processes (Bel & Fageda, 2007).

Complementary to this type of research, *case studies* provide a deeper knowledge and understanding for decision-making processes in specific situations. In this context, the main aim of our research is to showcase a mathematical analysis and assessment tool for complex scenarios, which normally takes into account different criteria at the time this decision is made. The technique applied in this case is the Analytic Hierarchy Process (AHP). This tool can be used to provide helpful information in decision-making processes and also to make an ex-post evaluation of de-

cisions already made by policymakers. In order to illustrate the use of this analytical tool, this article takes the example of a public company – Canal de Isabel II (hereafter referred to as CYII), which is responsible for integrated urban water management in the Region of Madrid, Spain.

In 2008, the president of the Regional Government of Madrid announced plans to partially privatise CYII. The interest in this case is due to the importance of this decision and the social reaction generated by the announcement. AHP is applied to evaluate whether or not this decision was rational. More specifically, this method analyses whether experts in water management – researchers and independent managers – agree that the best option for the Region of Madrid is in fact the one announced by the government. Considering this research is still in progress, it is only possible to introduce the current debate regarding the suitability of the type of management for urban water services and describe the data analysis technique.

This paper is organised as follows; Section 2 describes the context of the research, which serves to illustrate the data analysis technique proposed. Section 3 outlines the theoretical framework. Section 4 discusses the methodology. Finally, the fifth section comments on the work in progress.

## **2. BACKGROUND**

### **2.1. Diversification and expansion of CYII**

CYII is a public company with legal personality subject to private law. This company is responsible for integrated urban water management in the Region of Madrid. Since the 1st of July 2012, the Council of Government of the Region of Madrid approved the creation of a public limited company – Canal de Isabel II Gestión, SA<sup>1</sup> –, which is currently responsible for managing the supply, sanitation and reuse water services, including customer service and advertising and sales activities for almost the entire Region of Madrid (110 out of 178 municipalities). The social capital of Canal de Isabel II Gestión, SA, is as follows: 82.4% of shares belong to the Re-

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<sup>1</sup> The equivalent of '*Sociedad Anónima*' (SA) in the British legal framework is Public Limited Company (PLC).

gional Government, while the remaining 17.6 % of shares are spread across the municipalities assigned to this new management model.

Until 2012, CYII supplied water to 175 of the 179 municipalities of the Region of Madrid and 6.48 million inhabitants, almost the entire population (Canal de Isabel II, 2012). At present, this figure is somewhat lower. CYII activity has surpassed the objectives set out in its founding statutes. Since the early 1990's, the Company implemented a strategy of business diversification and expansion in order to leverage its expertise in public service management, the liquidity of its assets and its high level of technological development (Ortega de Miguel & Sanz Mulas, 2007). Besides managing integrated urban water services, CYII participates in other sectors, such as hydropower or telecommunications.

According to data from 2012, CYII has shares in companies that operate in the hydropower sector, such as Hidráulica Santillana (100% direct participation). In addition, a holding company has been created - Canal Energía S.L. (80% direct and 20% indirect participation) to participate in a group of companies that perform activities related to the production, processing, marketing and distribution of electricity. In the telecommunications sector, CYII has created a subsidiary company - Canal de Comunicaciones Unidas S.A.U. (100 % direct participation), which executes projects and provides services in the fields of telecommunication, industrial and information systems. Through its participation in the company - Canal Extensia (100% direct participation), CYII has developed an expansion plan in Latin America. It holds operating licenses in Colombia, the Dominican Republic, Venezuela and Ecuador. CYII has also conducted technical assistance programs through contracts with the World Bank in countries including Cuba, Brazil and Venezuela.

In summary, today the activity of CYII transcends the original purpose intended in its founding statutes. It is a public company at the head of a multinational holding company operating in different sectors, different Spanish cities and several different countries around the world, mostly concentrated within Latin America. In this regard, it is important to note the fact that CYII is a public company which re-

ports a net annual profit of more the 100 million euro per year (135 million euro in 2011).

## **2.2. The bill for the privatisation of CYII**

In the plenary sessions of the Madrid Government Assembly on the 16th and 17<sup>th</sup> of September 2008, the parliamentary group of the Partido Popular (PP) - the political party governing in majority - proposed the partial privatisation of CYII. The minutes of such meetings highlight the arguments used to defend the privatisation process (Gobierno de la Comunidad de Madrid, 2008).

During these meetings, the parliamentary speaker of the group indicated that the Region of Madrid will face growing water needs in the near future due to population increases and must fulfil to the environmental and management requirements set out in the EU Water Framework Directive. As a result, the necessity for major investment in new infrastructure and technological processes in coming years was recognised. The required investment is estimated at 4 billion euro. Among other projects, this would provide for the construction of two new reservoirs, one in the north of Madrid, the other in the south. Moreover, the execution of the works included in the previous plan (National Plan for Sanitation and Water Purification 1995-2005) must also be completed. Those works are now included in the new National Plan for Water Quality (2007-2015), with an extra value of 2.79 billion euro.

In view of the fact that the current economic and financial situation was highly unfavourable, the parliamentary group proposed to use new forms of management and financing in order to maintain the quality management of CYII, while attracting new financial resources and increasing citizen involvement in decision-making processes. More specifically, a new law was proposed to allow the creation of a public limited company to manage urban water services for the Region of Madrid. Initially, the Government of the Region would hold 100% of the social capital, of which a maximum of 49% of shares could later be sold on financial markets or the stock market. According to the political group, this will provide funding and allow the citizens of Madrid to improve their participation in water management decisions as minority shareholders.

Due to the majority rule of the political party in the government, the proposal was approved in the plenary sessions with 66 votes for and 52 votes against. In December 2008, in section 16 «*Capitalización del Canal de Isabel II*» of the new law, the privatisation agreement was embodied. In June 2012, a new company was created – Canal de Isabel II Gestión, SA. However, although it is legally possible to (partially) privatise this new company, the process has not yet taken place due to difficulties in finding investors due to the unfavourable economic situation in Spain at present.

### **2.3. Strong citizen opposition**

After the announcement of partial privatisation of urban water services, a citizen movement emerged in Madrid in clear opposition to that political decision. *La Plataforma contra la privatización del Canal de Isabel II* consists of several social organisations: neighbourhood associations, sections of major Spanish national unions, political parties in the opposition and individual citizens.

There have been some notable events related to the movement including several mobilisations and demonstrations against privatisation as well as a claim being submitted to the Constitutional Court in March 2012 alleging that the decision is not constitutional. The movement's greatest impact came when a referendum was proposed on the 4th of March 2012. This (informal) consultation asked citizens about their preferences regarding the ownership of water service management. 99% of participants voted against any changes in ownership, preferring to continue with public management.<sup>2</sup>

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<sup>2</sup> This is remarkable, as a similar social movement – *Forum Italiano dei movimenti per l'acqua* – began in Italy in 2009. For similar reasons, this movement was opposed to a water privatisation project initiated by the government at the time. Their first achievement was a Constitutional Court ruling in favour of conducting a national referendum in relation to the privatisation of water services (Corte Costituzionale, sentenza n. 29/2011). Subsequently, the referendum was held in conjunction two other topics of interest to the Italian citizens. 95% of Italians voted against the privatisation of water services. On Tuesday, the 7th of June 2011, the Italian Constitutional Court upheld the claim and the privatisation project undertaken by the government was defeated (Corte Costituzionale, sentenza n. 174/2011).

The citizen movement against privatisation is a warning that the case of Madrid is very similar to that which took place in Berlin. In 1999, a consortium of two large multinational companies (Veolia and RWE) with experience in water service management and other industries, acquired 49.9% of the shares of Berliner Wasserbetriebe (BWB), the municipal company responsible for urban water service management in Berlin. According to Lanz & Eitner (2005) there have been problems associated with the privatisation process: including a significant increase in water rates; a substantial reduction in the workforce, which was a breach of the agreements with the unions prior to the privatisation process; problems related to water quality and a lack of investment in maintenance; in addition, a disproportionate rate of profit in favour of the private partner (minority shareholder) has been recorded, causing serious detriment to the City of Berlin and its citizens.

### **3. THEORETICAL FRAMEWORK**

The debate regarding the (partial) privatisation of urban water services in Madrid remains open. Undoubtedly, the intensity of this debate will increase if the Government of the Region considers it appropriate to enforce the option of selling 49% of the shares of Canal de Isabel II Gestión SA. In light of the discrepancy of opinion between the government and a large proportion of society, this section highlights the existing theoretical positions in regard to the arguments that the Government of the Region wields in defence of the partial privatisation process.

#### **3.1. Considerations regarding management capacity of water services: competition, efficiency and funding**

##### *Market failure and Public Choice*

*The public interest theory*, based on market failures, argues that when the market is not able to obtain the most efficient (and equitable) results, public sector intervention in economic affairs is justified. This is the case of 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 to service provision.

However, since the last quarter of the 20th century, a significant privatisation trend in the management of water services can be observed in many industrialised countries. According to the *Public Choice Theory* there are two possible explanations: (1) on the one hand, privatisation of service management incorporates competition into those activities where there is a public monopoly (Savas, 1987). Outsourcing public service management through competitive bidding processes can lead to a reduction in costs if politicians and bureaucrats are no longer permitted to monopolise public services (Niskanen, 1971); (2) on the other hand, according to Donahue (1989), private participation can promote a better use of economies of scale in those cases in which public services are delivered at suboptimal level. Privatisation can be a useful tool to aggregate water supply demands from different municipalities, particularly in the case of smaller municipalities, achieving a more efficient scale of operation.

Nevertheless, there is no consensus on this issue. As regards the first explanation, it is not clear that bidding processes incorporate real competition into the water sector. At best, quasi-markets are achieved with a limited number of bidders (Sclar, 2000; Bel & Warner 2008). Regarding the second explanation, privatisation is not the only way to aggregate demand. The same result can be achieved through other forms of inter-municipal cooperation (Bel & Fageda, 2007; González-Gómez et al, 2009).

Additionally, empirical evidence regarding efficiency depending on management ownership can be described as non-conclusive (González-Gómez & García-Rubio, 2008; Bel & Warner, 2008; Abbott & Cohen, 2009; Bel et al., 2010). In this vein, the studies that suggest that private companies are more efficient may just be reflecting the greater tendency of public companies to operate in scenarios with greater diseconomies of scale and scope (Carvalho et al., 2012). It is certainly logical that private companies will avoid operating in scenarios where expected returns are lower (González-Gómez et al., 2011).



### *Financial aspects related to water management*

Additionally, the advocates of private participation in the management of water services back their stance using financial reasons. During the second half of the 20th century, policymakers in most industrialised countries justified tax increases to expand the welfare state, including the cost of urban water services. However, since the crisis in the 1970's and the first tax revolts in the U.S. at the beginning of the decade, this financial resource has been disputed. Many policymakers were forced to govern with minimal margin to raise local taxes. As a result, the existence of fiscal restrictions has been considered one of the most important explanatory factors in the privatisation processes (Bel & Fageda, 2009), or partial privatisation processes, of urban water management (Bel & Fageda, 2010).

Many policymakers have contemplated privatisation as a very attractive and efficient financial resource (Ruiz-Villaverde et al, 2010). Nonetheless, authors such as Massarutto et al (2008) highlight the importance that funding costs are directly proportional to the economic risk which investors must bear. The water industry is capital-intensive with assets having a long economic life; therefore, it is particularly sensitive to capital expenditures. This raises doubts over the idea that private companies have more incentives to reduce costs and ease of access to financial markets. Private management can be more efficient in many cases, but not necessarily for capital-intensive service infrastructure.

### **3.2. Other relevant aspects: monitoring and citizen involvement**

#### *Agency theory*

In the case of public services, *the principal-agent problem or agency dilemma* focuses on how to ensure citizens' interests (the principal) prevail over managers' interests (the agent), taking into account the difficulty of designing a contract (in the case of contracting out service management) to promote competitive dynamics and reduce the likelihood of monopolistic behaviour (Bolton & Dewatripont, 2005). In this way, it is necessary to implement processes of effective supervision and control that could

help reconcile managers' objectives with those of the public administration and citizens.

Academic discussion focuses on studying when the monitoring and supervising processes are more effective in terms of an agent's performance. Thus, two criteria are taken into account, ownership and company size. In the case of small companies, the supervision and control exerted by the owners is stricter in the case of private ownership (Bel, 2006). For larger companies there is no evidence that one type of management outperforms the other in terms of supervision and control processes. In both cases - public and private ownership - monitoring processes can become highly inefficient.

#### *Incomplete contracts and property rights theory*

Partial privatisation deserves special attention. Public-Private Partnerships (PPP) have played an increasingly important role in the field of local public service management since the late 1990s, particularly in the water industry. This is the case of Spain (Ruiz-Villaverde et al, 2010) and other European countries. PPP are alternative forms of management organisation which differ to the existing dichotomy between purely public or private management. Under this model of mixed public-private management, the government maintains a degree of control over the private partner, which is the body that is responsible for the-day-to-day operations of the company.

Some studies addressing this issue have put forward several arguments in favour of mixed public-private management (Matsumura, 1998; Bel & Fageda, 2010). This formula incurs less monitoring costs by reducing transaction costs. The key issue is that policymakers can exercise direct control over the company through their ownership rights, as well as the parallel regulatory framework. Even in cases where companies manage services independently from the government, policymakers will always be able to have their say regarding general objectives, particularly in the case of municipalities which hold 51% of the operating company. Moreover, government involvement in the board of directors helps to reduce expected problems related to long-term incomplete contracts. Finally, it is worth adding that pri-

vate utility managers have strong incentives to reduce costs without considering the potential deterioration of service quality (Hart et al 1997). However, partial privatisation may lead to lower costs compared to purely public management, while also promoting improvements in the quality of service compared to purely private management (Schmitz, 2000).

In addition, there are also signs of non-academic consensus on the issue. Eckel & Vining (1985) argue in their theoretical investigations that mixed public-private companies can result in the worst aspects of both public and private management, where neither profitable nor social goals can be effectively achieved.<sup>3</sup> For effective internal supervision in a mixed company it is necessary for public representatives to possess a high level of expertise and some important ethical standards (Marra, 2007). Moreover, mixed companies often lack clarity and stability when setting goals (Boardman & Vining, 1989), while also facing internal conflicting pressures resulting from the coexistence of private and public interests within the same company. It should also be noted that defining social objectives or measuring results is difficult in this type of management model. This aspect complicates assessment and the degree of success of mixed companies.

#### *Greater citizen involvement: new public service, communicative planning and social choice theory*

New trends in the field of planning and public administration indicate that besides interacting with markets, policymakers must interact with communities by promoting deliberative democratic processes (Nalbandian, 2005; Denhardt & Denhardt, 2000). These new trends have been coined the “*new public service*” in public administration (Denhardt & Denhardt, 2003) and “*communicative planning*” in the area of planning (Healey, 1996). The result of combining these two approaches leads us to

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<sup>3</sup> Ferreira & Marques (2012) conducted four case studies in Portugal and according to their findings, theoretical advantages of partial privatisation in local public services are not clearly observed in practice, particularly in regards to the defence of general interests. For these authors, empirical evidence shows that it is very difficult under public-private management to satisfy two interests of opposed nature. Usually, interests of the private entity (profit maximisation) prevail over citizens’ interests.

understand policymaker decisions as dynamics that integrate market mechanisms and deliberative processes that take into account citizens' opinions (Allmendinger et al., 2003; McGuirk, 2001).

On grouping these theoretical trends in the field of planning and public administration, one could speak of an ideological shift in the theoretical approach. Hefetz & Warner (2007) empirically demonstrate that this ideological shift might already be occurring in some U.S. cities.

The *social choice theory* could be the ideological shift referred to by the foregoing authors. This theory goes one step further and proposes repetitive processes of dialogue, which combine elements of markets and planning as a way of achieving optimal social solutions. The main assumption of this theory is the importance of deliberation, especially under situations where there are significant conflicts of interests. According to this theory, policymakers recognise the potential market solutions, but they need debate and dialogue in order to respond to the diversity of interests and possible conflicts.

The main challenge of this theory is to create the right context in order to take into account citizens' opinion while developing political capacity to detect possible differences of interest and identify solutions that do not divide the community (Nalbandian, 2005).

#### **4. METHODOLOGICAL NOTES**

The choice of water utility management type is not an easy decision. On the one hand, the choice will be made considering different decision criteria. On the other hand, as outlined in the previous section, the criteria have pros and cons, which lead to discussion regarding the appropriateness of different forms of public service management.

Leaving aside the common controversy between the political party in government and the parties in the opposition, it would be convenient to introduce objec-

tive assessment and useful decision-making techniques for complex environments such as that which concerns the choice of urban water services management type.

#### 4.1. The Analytic Hierarchy Process method

This study intends to use the Analytic Hierarchy Process (AHP) (Saaty, 1980). The AHP is a mathematical technique used to study problems with complex decision-making processes. It is particularly recommended for workgroups in complex scenarios with significant long-term repercussions (Bhushan & Kanwal, 2004).

The AHP is used to determine the weightings of a number of decision alternatives with respect to a final goal. During the process, decision makers perform assessments considering the different criteria and sub-criteria of an introduced hierarchy. The assessments are made by pairwise comparisons of the elements defined in each of the hierarchical levels compared to the higher level. A 9-point scale is used for pairwise comparisons. Thus,  $A=(a_{ij})$ , is the reciprocal matrix obtained from the pairwise assessments of the elements. The weightings (priority vector) 'w' can be obtained in different ways. The most common are: (a) The principal right eigenvector (EM) (Saaty, 1980) and (b) the geometric mean vector (GMM) (Crawford & Williams, 1985).

(a) *The principal right eigenvector (EM)*

$$A w = \lambda_{\max} w, \quad \sum_{i=1}^n w_i = 1 \quad (\text{normalised}) \quad (1)$$

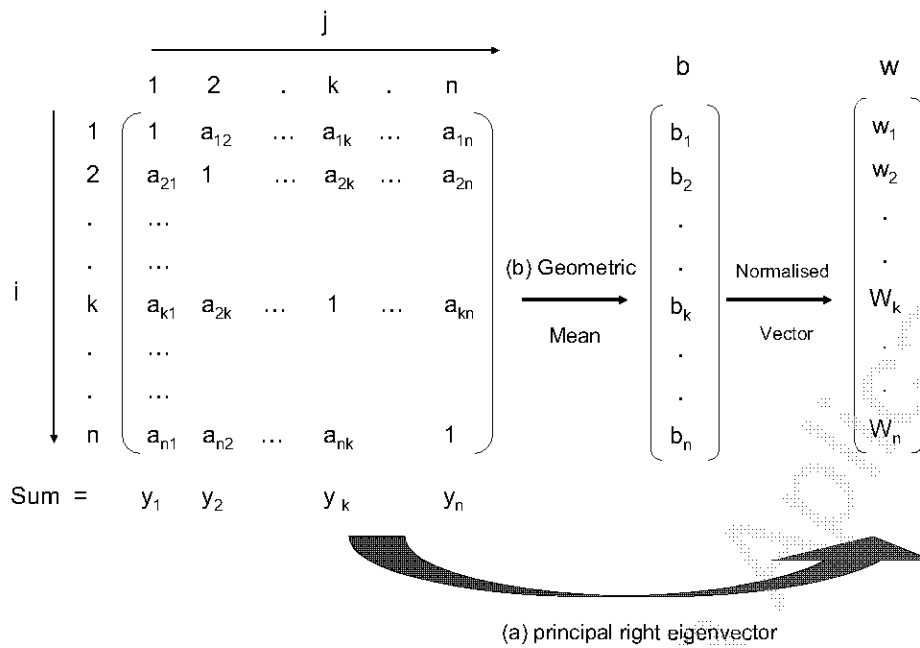
where  $\lambda_{\max}$  is the principal eigenvalue of the matrix A, which is obtained by solving:

$$\det(\lambda I - A) = |\lambda I - A| = 0 \quad (2)$$

(b) *The geometric mean vector (GMM)*

$$w_i = \left( \prod_{j=1, j \neq i}^n a_{ij} \right)^{1/n} \quad i = 1, \dots, n \quad \sum_{i=1}^n w_i = 1 \quad (\text{normalised}) \quad (3)$$

The process can be summarised as follows:



Finally, in order to verify whether the vector of priorities has been estimated correctly, consistency is measured. We measure how acceptable the alternative is in terms of a Consistency Ratio (C.R.). Generally 10% inconsistency is tolerated.

$$\text{Consistency ratio (C.R.)} = \frac{\text{Consistency index (C.I.)}}{\text{Randomly generated consistency index (R.I.)}} \quad (4)$$

where the consistency index (CI) is estimated as follows:

$$CI = \frac{\lambda_{\max} - n}{n - 1} \quad (5)$$

and randomly generated consistency index (RI) values are given in Table 1.

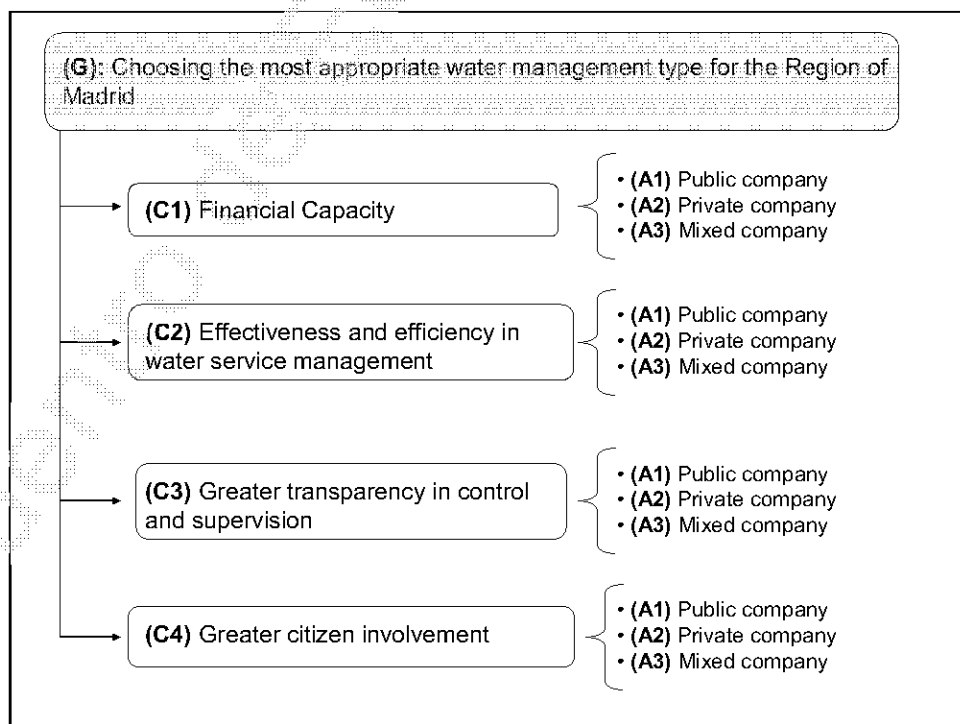
**Table 1**

N	1	2	3	4	5	6	7	8	9
Randomly generated consistency index (R.I.)	0	0	0.52	0.89	1.25	1.35	1.40	1.45	1.49

*Applying AHP to the case study: privatisation of CYII*

As noted in section 2 of this article, the political party in power has shown its preference for partially privatising the management of the urban water service in the Region of Madrid. Is this the best decision in terms of general interest? The reaction of the people of Madrid suggests there is a possibility that this decision was motivated by reasons other than public interest. In the absence of a theoretical framework that allows us to confirm the superiority of one management model over another, and bearing in mind the social reaction the decision has caused, the intention here is to obtain the valuation of experts in water service management, namely researchers and independent managers who have knowledge about the issue at hand by making use of the AHP. In sum, we aim to ascertain what decision these experts would have taken in regard to the choice of management model, taking into account the criteria the Regional Government of Madrid used to defend their stance in favour of partial privatisation at the plenary session of the Regional Government Assembly. The result could give an indication of how rational the decision was and whether or not citizens' interests did in fact prevail during the decision making process.

**Figure 2.** Hierarchical design of the case study



For analytical purposes, the management alternatives for urban water service in the Region of Madrid are included among the possible formats for indirect management recognised by the current legislation (we have omitted the alternative of pure public ownership on behalf of the local government due to not being a realistic option). As a result, we have: *Alternative 1 (A1)*. Continue as a public company that reports to the Regional Government of Madrid; *Alternative 2 (A2)*. Establish a Public Limited Company (with 100% private capital); and *Alternative 3 (A3)*. Establish a Public Private Partnership (Public Limited Company 51% owned by the Regional Government of Madrid and 49% by a private partner), the alternative proposed and approved in the Parliament of the Regional Government of Madrid (see Figure 2).

The criteria used to evaluate these options stem were taken from the arguments used in the plenary sessions of the Regional Government of Madrid: *Criterion 1. Financial capacity (C1)*: In view of the imminent need for investment that CYII was facing, according to the information provided by the politicians responsible, this criterion refers to the company's ability to obtain the necessary financial resources; *Criterion 2. Effectiveness and efficiency in water service management (C2)*: This criterion refers to the technical and economic organisation capacity of the company that manages the water service (for example, use of economies of scale and network density, incentives to innovate and reduce costs, capacity to apply new technologies, etc.); *Criterion 3. Greater transparency in the control and supervision of water service management (C3)*: this criterion refers to the company's capacity to create a transparent information system that makes it possible to control and supervise company managers so as to ensure the prevalence of the interests of society that are typical of a preferential service. Supervision and control should also encompass criteria of economic rationality in terms of the associated costs; finally, *Criterion 4. Greater citizen involvement (C4)*: The EU Water Framework Directive makes a special call to citizens to stay informed and participate in decision making related to water management.



## 5. WORK IN PROGRESS

Information is currently being gathered by means of a questionnaire regard the evaluation of experts in water service management – independent researchers and managers – with knowledge of the issue being addressed. More specifically, the experts belong to the following groups: (1) expert researchers with extensive experience in local public management; (2) professionals who work or have worked in integrated urban water management.

The results we obtain and their analysis should provide substance for an interesting discussion and conclusions. In the first place, rather than helping us to find an optimum solution, AHP analysis will help us understand the complexity of this decision-making process. The discussion will revolve around four aspects and their priorities: (1) financing possibilities. To what extent does the option of privatising improve financing possibilities? (2) Would incorporating a private partner into CYII enhance management effectiveness and efficiency? What do our experts think about this issue? (3) What type of company is the most transparent and easiest to supervise? A private, public or mixed company? (4) Finally, is the involvement of citizens and their interest in urban water service management important?

Ultimately, the discussion of the results of this study should provide a sufficient indication of the rationality of the decision made and whether or not citizen interests have in fact prevailed during the decision making process. The case of CYII will therefore have served as a means of presenting the AHP as a way of incorporating greater rationality and consistency into decision making processes in the public administration. Governments could, prior to decision-making, use this analytical tool to gather information from experts in different fields.

**Acknowledgements:** The authors would like to take this opportunity to thank Andrés Sanz Mulas, Dirección de Estudios, Instituto de Estudios Fiscales, Ministerio de Hacienda y Administraciones Públicas. We also gratefully acknowledge the financial support from Ministerio de Economía y Competitividad (project ECO2012-32189).

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