

Pricing and contracting-out in Spanish urbanwater sector: Theoretical foundations and evidence

María A. García Valiñas
(University of Oviedo)

Francisco González Gómez
(University of Granada)

Nicolás Melissas
(Instituto Tecnológico Autónomo de México (ITAM))

Javier Suárez Pandiello
(University of Oviedo)

Abstract

Water is a merit good that has important implications in economic, social and environmental dimensions (OECD, 2003). Moreover, urban water supply is considered a service of general interest in the European Union (EU, 2001). As a consequence, local water services management has become a key issue during the last decades.

Additionally, it has been observed an increasing of private operators into the water sector. Thus, public-private partnerships (PPP) have emerged as a usual way of collaboration in the management of local water services (World Bank, 2006).

Several studies have investigated the process and consequences of PPP schemes in water sector. According to Menard (2012), PPP is primarily a contractual approach to the delivery of infrastructures, goods and services traditionally provided by the public sector or by private operators subject to

tight command-and-control regulation, such as public utilities. Thus, some papers have analysed the consequences of PPP on prices (Hall and Lobina, 2004; Lobina, 2005; García et al., 2005; Chong et al., 2006; Carpentier et al., 2006; Martínez-Espiñeira et al., 2009; Ruesterand Zschille, 2010; Picazo-Tadeo et al., 2012), quality (Shaoul, 1997; Lobina and Hall, 2000), or efficiency, (González-Gómez and García-Rubio, 2008; Picazo-Tadeo et al. 2009a and b) with different conclusions. Andrés et al. (2008) and Gassner et al. (2008) also address the debate of private versus public water utilities in developing and transition economies.

In this research in progress we analyse both theoretically and empirically PPPs in the water sector. So, we will describe the institutional water sector framework in Spain. After that, we will develop a theoretical model to explain PPP and auctioning in the water sector, assuming profit maximization in the case of private operator, and the presence of a vote-maximizing local government. Moreover, based on a database of Spanish municipalities recently privatized, we will test the effects of PPP on several key variables.

Findings support that, in a context of limited resources, local governments are using public-private partnerships in order to get additional fundings to reduce their indebtedness levels. Moreover, the fact of setting a high reservation price as a way to guarantee a minimum amount of resources has had consequences in terms of water price increases after water services privatization.

References

Andrés, L., Guasch, J.L., Haven T., Foster, V., (2008). *The impact of private sector participation in infrastructure: Lights, shadows and*

the road ahead. Latin American Development Forum Series. Washington, DC: World Bank.

Carpentier, A., Nauges, C., Reynaud, A., Thomas, A., (2006). “Effets de la délégation sur le prix de l’eau potable en France: Une analyse à partir de la littérature sur les effets de traitement.” *Economie et Prévision* 174(3), 1-20.

Chong, E., Huet, F., Saussier, S., Steiner, F., (2006). “Public-private partnerships and prices: Evidence from water distribution in France.” *Review of Industrial Organization* 29(1/2), 149-169.

EU, European Union, (2001). *Services of General Interest. Report to the Laeken European Council*. Commission of the European Communities. COM (2001) 598 final. Brussels.

García-Valiñas, M.A , González-Gómez, F.J. y Picazo Tadeo, A., 2012. “Is the price of water for residential use related to provider ownership? Empirical evidence from Spain”, forthcoming in *Utilities Policy*.

Gassner, K., Popov, A., Pushak, N., (2008). “Does private sector participation improve performance in electricity and water distribution? An empirical assessment in developing and transition countries.” *PPIAF Trends and Policies Series*. Washington, DC: PPIAF.

González-Gómez, F., García-Rubio, M.A. (2008). “Efficiency in the management of urban water services. What have we learned after

Hall, D., Lobina, E., (2004). “Private and public interests in water and energy.” *Natural Resources Forum* 28, 268-277.

Lobina, E., (2005). “Problems with private water concessions: A review of experiences and analysis of dynamics.” *Water Resources Development* 21 (1), 55-87.

- Lobina, E., Hall, D., (2000). "Public sector alternatives to water supply and sewerage privatisation: Case studies." *Water Resources Development* 16(1), 35-55.
- Martinez-Espiñeira, R., García-Valiñas, M.A., González-Gómez, F., 2009. "Does private management of water supply services really increase prices? An empirical analysis." *Urban Studies* 46(4), 923-945.
- Menard, G. (2012). "Is public-private partnership obsolete? Assessing the obstacles and shortcomings of PPP", forthcoming in P. De Vries and E. Yehoue (eds.), *The Routledge Companion to Public-Private Partnership*, London: Routledge. Available at http://halshs.archives-ouvertes.fr/docs/00/65/30/90/PDF/2011_Menard-Public-Private_Partnership.pdf.
- OECD. (2003). *Improving water management*. OECD. Paris.
- Picazo-Tadeo, A.J., González-Gómez, F., Sáez-Fernández, F.J., (2009a). "Accounting for operating environments in measuring water utilities' managerial efficiency." *The Service Industries Journal* 29(6), 761-773.
- Picazo-Tadeo, A.J., Sáez-Fernández, F.J., González-Gómez, F., (2009b). "The role of environmental factors in water utilities' technical efficiency. Empirical evidence from Spanish companies." *Applied Economics* 41(5), 615-628.
- Ruester, S., Zschille, M., (2010). The impact of governance structure on firm performance: An application to the German water distribution sector." *Utilities Policy* 18(3), 154-162.

Shaoul, J., (1997). "A critical financial analysis of the performance of privatized industries: the case of water industry in England and Wales." *Critical Perspectives on Accounting* 8, 479-505.

World Bank (2006). *Approaches to Private Participation in Water Services: A Toolkit*. The World Bank and Public-Private Infrastructure Advisory Facility, Washington DC, USA.