

**WHY DO MUNICIPALITIES RENEW THEIR CONTRACTS WITH PRIVATE
COMPANIES? THE CASE OF SPAIN**

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Abstract

After analysing the explanatory factors underlying the renewal of privatisation contracts, this paper examines the likelihood of local authorities renewing their contracts with private entities for the provision of public services, by studying a sample of 623 Spanish municipalities for the period 2002-2013, using a logit model. The type of service, the duration of the contract and certain political and economic factors were all found to influence the renewal or otherwise of this type of contract. Moreover, this effect differed between initial privatisation and subsequent contract renewal.

Keywords

Renewal, Local government, Privatisation, Contracts.

Resumen

Después de analizar los factores explicativos de la renovación de los contratos, este artículo examina la probabilidad de que la autoridades locales renueven sus contratos con entidades privadas para la provision de los servicios públicos, analizando para ello una muestra de 623 municipios españoles para el periodo 2002-2013, a través de un modelo logit. Así, se ha podido demostrar que el tipo de servicio, la duración del contrato y ciertos factores políticos y económicos tienen influencia tanto en los contratos, como en la renovación de los mismos. Además, este efecto difiere entre los procesos de privatización inicial y los subsecuentes procesos de renovación de los mismos.

Palabras clave: *Renovación, Gobiernos locales, Privatización, Contratos*

Introduction

In recent years, due in part to the current context of global economic and financial crisis, many local authorities have sought to achieve significant cost savings. Numerous studies have been conducted into how this goal may be achieved, and privatisation has been identified as an important mechanism in this respect (Zafra-Gómez et al., 2016).

Although cost savings are one of the most sought-after outcomes, this is not the only benefit derived from privatisation. This change can also favour the optimisation of resources and/or promote competitiveness (Bel and Fageda, 2006) and some proponents argue that privatisation can contribute to enhancing service quality (Levine, 1978; Christoffersen and Bo Larsen, 2007) and to raising levels of efficiency (Osborne and Gaebler, 1992; Boyne, 1998; Hodge, 2000; Bel et al., 2010; Plata-Díaz et al., 2014).

Nevertheless, studies of privatisation have raised doubts about the real-world benefits obtained by the local authorities that have adopted this form of service provision. Questions have been raised as to whether privatisation actually increases efficiency levels, citing empirical evidence that privatisation does not achieve cost savings (Stevens, 1978; Bel et al., 2010; Berg and Marques, 2011; Hodge, 2000; Simões and Marques, 2012). Similarly, Domberger and Jensen (1997) and Jensen and Stonecash (2005), among others, found no evidence that privatisation reforms produce cost savings or efficiency improvements.

Furthermore, even if privatisation does reduce costs, it may also incur transaction costs (Brown and Potoski, 2003). In view of these conflicting opinions, we believe it necessary to analyse whether privatisation actually generates sufficient cost savings to offset any transaction costs, taking into account that the changeover will probably involve significant new costs in terms of the significant time and effort required to dismantle existing production and management systems and to create new ones. It should be taken into account that such an assessment should be conducted over the long term (Mañez et al., 2016), as a short-term outlook could produce erroneous results. In the presence of significant transaction costs, we would expect few changes in the form of service delivery (Brown et al., 2008). Another important feature that could shed light on the viability of privatisation is that of the possibility of its renewal. This aspect is rarely discussed in the literature, and is the focus of our study in this paper.

The analysis of privatisation contracts and their renewal should include characteristics such as the type of service, the complexity of its provision and the duration of the contract – factors that may determine its renewal or otherwise (Joskow, 1987; Bel and Fageda, 2011; Rodrigues et al., 2012; Brown et al., 2015).

Taking into account the above considerations, the main aim of this paper is to analyse the factors that might influence the renewal of contracts for the privatisation of local public services, taking renewal to mean the continued provision of a public service by a private body following the conclusion of the initial period of contract validity. To achieve the study goals, we examined various factors, including characteristics of the contracts, such as their duration, the type of services provided, and economic, financial, political and socio-economic factors, in the context of a large set of privatisation contract renewals that took place during the period 2002-2013 in Spanish municipalities. This analysis was performed using logistic regression (Dubin and Navarro, 1988; Bel and Fageda, 2007, 2009; Ashworth et al., 2005).

The results obtained indicate that this type of contract renewal depends largely on the type of services to be provided; in general, water supply and treatment, waste disposal and public transport, which present the highest degree of service complexity

(Brown and Potoski, 2003; Rodrigues et al., 2012), are the most likely to be renewed, while the opposite is true for administrative services. Moreover, the greater the duration of the previous contract, the lower the likelihood of renewal. This finding contradicts the hypothesis that a longstanding commitment between the two parties increases the likelihood of renewal. When the municipality has a budget surplus, this too decreases the likelihood of contract renewal. On the other hand, the political strength of the governing party and its political sign, as well as the population size, are all significantly and positively related to the probability of contract renewal. Finally, the political cycles considered in this study did not affect the renewal of contracts for the provision of public services.

The rest of this article is structured as follows. In the next section, we analyse the contractual characteristics that might affect contract renewal. We then study the economic, financial, political and socioeconomic factors that could exert an influence in this respect, after which we conduct an empirical analysis of the variables, the data and the method applied. Finally, the results obtained are analysed and discussed, and we present the main conclusions drawn.

Contract renewal and contract features: type of service and duration

Before privatising a public service, managers must analyse the risks involved in the operation and the transaction costs that may be incurred (Brierly, 2004; Brown and Potoski, 2003; Williamson 1981, 1991). The latter calculation is a key element in the decision, and is often complicated by inadequate information. The service characteristics that most often affect the privatisation decision are those of asset specificity and the presence/absence of difficulties in measuring or monitoring service quality (Williamson, 1981), which in turn reflect the degree of service complexity.

By asset specificity, we refer to services that require specialised investment which is difficult to adapt to the provision of other services (Brown and Potoski, 2003). Previous studies have shown that local managers are more likely to privatise services with high levels of asset specificity (Brown and Potoski, 2003; Shrestha and Feiock, 2004) because such services require a large initial capital investment, which is most readily obtained by means of privatisation (Brown and Potoski, 2003). However, the privatisation of these services often causes public entities and private providers to engage in a longstanding contractual relationship because of the high costs involved in switching to another seller or buyer (Klein et al., 1978). For this reason, contract renewal is most likely for the provision of public services that present high asset specificity.

The term measurement difficulty refers to the problems encountered in evaluating service outcomes and in monitoring supplier performance (Carr et al., 2009; Brown and Potoski, 2003b). This feature, too, may influence the process of contract renewal with private operators. Moreover, for services that are already privatised, remunicipalisation could involve significant costs, for example if the production and management capacity necessary for their direct delivery were lost (Sclar, 2001; Van Slyke 2003; Brown et al., 2008) and production and management systems had to be reconstructed, staffed and activated (GAO, 1998, 2002).

A priori, we assume that the contract renewal of a privatised service is determined by the complexity of the municipal service to be provided. Thus, the first hypothesis to be tested is:

Hypothesis 1: Service complexity influences the decision to renew a privatisation contract.

Another feature that is relevant to the renewal of a privatisation contract is its duration. According to Joskow (1987), this factor is directly related to contractual

commitment. The stipulated contract duration can significantly affect subsequent renewal decisions. The passage of time is known to be a relevant factor in privatisation operations (Bel and Fageda, 2007; González-Gómez and Guardiola, 2009), since it can influence the achievement of the efficiency goals established for the privatisation process. In this respect, see Máñez et al. (2016) regarding municipal waste collection services. These authors concluded that in the short term the expected cost savings are not usually achieved, although the situation improves in the long term, possibly due to better contract management. Other studies of situations in which local authorities have contracted private entities for the provision of public services have concluded that long-term contracts, as well as producing savings on transaction costs (Domberger and Jensen, 1997; Hart and Moore, 1999; Tadelis, 2002) help create a relationship based on trust, reciprocity and joint participation in the application of contracts (Brown et al., 2006). These benefits are presumed to represent a predisposition in favour of renewal. For these reasons, we make the following hypothesis about the contract duration-renewal relationship:

Hypothesis 2: The greater the duration of the contract, the greater the likelihood of its renewal.

Political and economic factors underlying the renewal of public service contracts

Financial condition is one of the most important factors influencing privatisation decisions, in the sense that a poor financial situation is expected to lead to greater privatisation (Zafra-Gómez et al., 2014). The existence of a relation between financial condition, specifically financial stress, and the privatisation of services suggests that this financial variable will also impact on the renewal of contracts for the provision of public services.

Nevertheless, some previous studies have failed to detect any relation between financial stress and privatisation (for example, Bel and Fageda, 2007), and therefore the existence of a relation between contract renewal and financial stress, and the possibility of measuring this relation by reference to financial condition, is open to debate. However, financial condition is a complex concept, which can be measured through various magnitudes that do affect the above-mentioned relation, and so it is important to study them as possible determinants of contract renewal.

Financial stress can be defined as the condition, level or degree of a public entity's financial situation (Hendrick, 2011) whose presence tends to provoke a worsening of this financial situation (Hendrick, 2011). Different magnitudes can be used to measure financial condition, including long-term budgetary solvency and service-provision solvency (Groves et al., 2003), together with indicators such as sustainability, flexibility and vulnerability (Greenberg and Hillier, 1995).

In the present study, short-term solvency and budget sustainability are considered as possible explanatory factors of contract renewal for the provision of public services. These variables were selected because empirical evidence has been obtained of their significance in the probability of privatisation (Zafra-Gómez et al., 2014). The latter study concluded that the study of changes in formulas for the provision and management of public services should address financial variables other than those strictly related to borrowing or taxation.

Short-term solvency is defined as an organisation's ability to generate sufficient liquidity to pay its short-term debts (Groves, Godsey and Shulman 2003). Zafra-Gómez et al. (2016a; 2016b) confirmed the existence of a relation between short-term solvency and privatisation, finding that when short-term solvency worsens, public services are more likely to be privatised. Therefore, we propose the following hypothesis:

Hypothesis 3: When short-term solvency worsens there is a greater likelihood that public service contracts will be renewed.

For a local authority, budget sustainability can be defined as its ability to maintain, promote and protect the welfare of the population, using the resources available for this purpose (Greenberg and Hillier, 1995; CICA, 1997; Groves, Godsey and Shulman 2003; Hendrick, 2011). According to previous studies, privatisation tends to improve service quality, particularly in small municipalities (Morgan et al., 1981; Stein, 1990; Boyne, 1998). Accordingly, the following hypothesis is proposed:

Hypothesis 4: When the budget deficit increases, there is a greater likelihood that public service contracts will be renewed.

In addition, the renewal of contracts for the provision of local authority services may be influenced by other factors, such as the political sign of the governing party (Dubin and Navarro, 1988; Bel and Fageda, 2009). Political ideology may be an explanatory factor both of privatisation and of the renewal or otherwise of contracts. There is empirical evidence that more conservative governments tend to rely more on the market for the provision of public services (Zafra-Gómez et al., 2016; Plata-Díaz et al., 2014). In the same vein, Bel and Fageda (2007) concluded that progressive governments are more likely to oppose the use of market mechanisms and to favour the public provision of municipal services. On the other hand, some studies have observed no significant influence of political factors on privatisation decisions (Lane, 2000) and hence on the renewal of service contracts. Taking into account these findings, the following hypothesis is proposed:

Hypothesis 5: Local authority governance by a conservative political party increases the likelihood that a public service contract will be renewed.

Political strength is another factor that can affect the renewal of public service contracts. In this respect, Ashworth et al. (2005) and Hagen and Vabo (2005) concluded that political fragmentation increases the possibility of greater long-term public spending, which can lead to increased privatisation as municipalities seek to eliminate the most costly services from their budgets (Zafra-Gómez et al., 2014). In consequence, this factor could also affect the renewal of privatisation contracts. Therefore, the following hypothesis is proposed:

Hypothesis 6: When a local authority is governed in coalition, there is less likelihood that a public service contract will be renewed.

In analysing local authority decision making, the presence of the electoral cycle, or what has been termed the “political budget cycle”, should also be considered. In this respect, Klomp and De Haan (2012) and Bastida et al. (2013) reported empirical evidence that political cycles can affect public finances, while Lago-Peñas and Lago-Peñas (2009) concluded that greater proximity to municipal elections is associated with a worsening financial situation. This phenomenon is provoked by the decisions, often motivated by political interests, taken by public managers as elections approach, and which can affect the municipal deficit or debt (Nordhaus, 1975; Aidt et al., 2011; Bastida et al., 2013; García-Sánchez et al., 2014).

In order to mitigate this effect, public managers seek to achieve cost savings, without reducing the provision or quality of public services (Christoffersen and Bo Larsen, 2007; Zafra-Gómez et al., 2010), and one way to do so is to privatise municipal services (and subsequently renew this privatisation). In this respect, the following hypothesis is proposed:

Hypothesis 7: The presence of political cycles increases the likelihood that a public service contract will be renewed.

Finally, there may also be other socioeconomic and geographic factors that influence contract renewal decisions. Thus, Bivand and Szymanski (2000) highlighted the presence of spatial effects in the distribution of the costs of the waste collection service in the United Kingdom. Other studies, by González-Gómez and Guardiola (2009) and Zafra-Gómez et al. (2016), indicate the influence of variables such as the size of the municipality (measured by the resident population), the index of tourism-oriented activities and the importance of the industrial sector in the area, all of which require analysis of their influence on the contract renewal process.

Application to Spanish municipalities. Data and method

The Spanish context

Government of the public sector in Spain is structured in three territorial areas – General State Administration, Autonomous (Regional) Administration and Local Administration – among which competences in the provision of public services are distributed.

The local administrations are regulated by Local Government Act (LRBRL) 7/1985, of 2 April, amended in 2013 by the Local Administration Rationalisation Act. stipulates the public services that must be provided, according to the size of the municipality. However, it does not establish any obligation to privatise municipal services, and local administrations retain the final decision as to the form of service management and provision (Balaguer-Coll et al., 2007). Thus, even smaller municipalities can decide how to manage their basic public services, such as water and waste collection (Warner and Bel, 2008). Accordingly, they are also empowered to decide on contract renewal. In this respect, the decision-making process must take into account the level of effective cost compared to other entities with similar characteristics, and possible outcomes include elimination of the service, delegating its provision to a higher administrative entity, or privatisation.

Data and method

This study was conducted using annual data obtained from various databases, for municipalities throughout Spain with more than 1000 inhabitants. After financial, political and socio-economic filtering, the final study sample consisted of 623 municipalities, representing almost 20% of the Spanish total (3183 municipalities with more than 1000 inhabitants). During the study period (2002-2013), these 623 local governments reported the existence of 1802 contracts (the value taken for the dependent variables in our logit model) with private entities for the provision of public services. These contracts, in turn, were renewable during the study period. Of the 1802 observations (contracts) obtained, those which were not renewed were awarded a score of 0 for the dependent variable, while those that were renewed were awarded a score of 1 for this variable.

The information analysed was obtained from various sources, depending on the type of data required. The information on socioeconomic variables was obtained from

CATEGORY OF SERVICE (IN THIS STUDY)	CATEGORY OF SERVICES (CUADRADO-BALLESTEROS ET AL., 2012; PÉREZ-LÓPEZ ET AL., 2015)	TYPE OF SERVICE (BROWN AND POTOSKI, 2003)	ASSET SPECIFICITY	MEASURABILITY
Category 1	Water supply	Water distribution	High	Low
		Water treatment	High	Low
Disposal of sludge		High	Low	
Sewage collection and treatment		High	Low	
Category 1	Urban waste	Residential solid waste collection	High	Low
		Solid waste disposal	High	Low
		Commercial solid waste collection	High	Low
		Street/parking area cleaning	Low	Low
Category 2	Culture and sport	Cultural and arts programmes	High	High
		Libraries	High	High
		Recreation facility operation/maintenance	High	High
		Museums	High	High
	Social and health care	Programmes for the elderly	High	High
Public health programmes		High	High	
Hospital management		High	High	
Category 2	Promotion	Child welfare programmes	High	High
		Cemetery maintenance/administration	Low	Low
Category 3	Transport	Operation of bus transit system	High	Low
	Urban	Street repairs	Low	Low
		Electricity utility management	High	Low
Category 3	Other	Parking meter maintenance and collection	Low	Low
		Parks maintenance and landscaping	Low	Low
		Buildings and ground maintenance	Low	Low
Category 4	Other	Police/fire service communications	High	High
	CATEGORY OF SERVICES	TYPE OF SERVICE (BROWN AND POTOSKI, 2003)	ASSET SPECIFICITY	MEASURABILITY

Source: Devised by the authors, based on Cuadrado-Ballesteros et al. (2012); Pérez-López et al. (2015) and Brown and Potoski (2003).

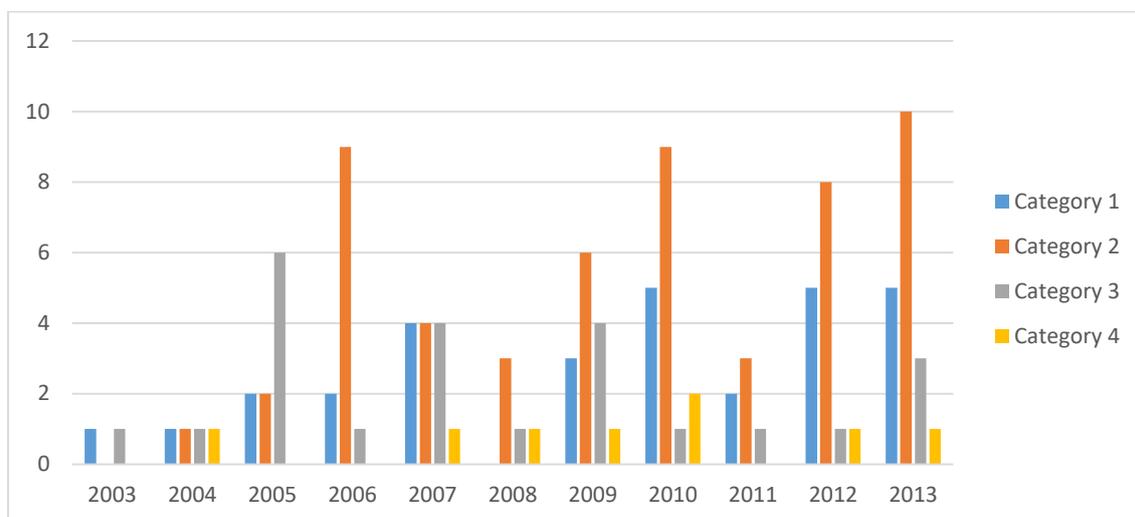


Figure 1. Number of contract renewals according to service categories

Our analysis also includes variables reflecting the financial condition of the municipalities, as possible explanatory factors of contract renewal (Table 2). According to Boyne (1998), who analysed the relation between fiscal stress and privatisation, one of the major problems encountered in measuring the relation between financial condition and contract renewal is the absence of reliable measures for this indicator. In this respect, Bel and Fageda (2007) observed that in some cases the measurement used for fiscal stress is the legal limitation imposed on public-sector borrowing and the tax burden. Taking into account these considerations, we analysed contract renewal using two factors to reflect financial condition, namely liquidity (Groves, Godsey and Shulman, 2003) and sustainability (CICA, 1997; Greenberg and Hillier, 1995; Groves, Godsey and Shulman., 2003; Hendrick, 2011). These indicators of financial condition have been adapted to the Spanish context by Zafra-Gómez et al. (2009a, 2009b, 2009c).

The information on political variables was obtained from the Ministry of the Interior, which publishes information on the political parties governing in each municipality. The information on political fragmentation was obtained by determining the number of councillors from each party present in each municipal government.

Table 2. Description of variables.

Variable	Description
Renewal	Dummy variable that takes a value of 1 if the municipality has renewed the privatisation contract and 0 otherwise
Duration	Length of the previous contract
Liquidity	Liquidity divided by net short-term liabilities

Non-financial budgetary result index (NFBRI)	Non-financial current budgetary receivables, non-financial capital budgetary receivables divided by current budgetary payables, non-financial capital budgetary payables
Political orientation	Dummy variable that takes the value of 0 if the municipal government has a conservative ideology, and a value of 1 if it is progressive
Political strength	Dummy variable that takes the value of 0 if the municipal government shares power with other parties, and a value of 1 if it has an absolute majority
Threepostelectoral	Dummy variable that takes the value of 1 if the municipal government has been in power for three years and the value of 0 for shorter or longer periods..
Twopostelectoral	Dummy variable that takes the value of 1 if the municipal government has been in power for two years and the value of 0 for shorter or longer periods.
Population (log)	Logarithm of the number of inhabitants
Industry	Index of industrial-oriented activities; a comparative index of the importance of the industrial sector in the municipality, calculated from the tax on economic activities with respect to industrial activities.
Tourism	Index of tourism-oriented activities; a comparative index of the importance of tourism to the municipality, calculated from the tax on economic activities, which in turn is based on the category of tourist establishments, the number of bed-places offered and the annual occupancy.

Source: Devised by the authors.

Most studies of the factors underlying the privatisation decision are based on a discrete choice model (Bel and Miralles, 2003; Dijkgraaf et al., 2003; Joassart-Marcelli and Musso, 2005; Tavares and Camões, 2007; Bel and Fageda, 2010; Mohr et al., 2010; González-Gómez et al., 2011). The present study uses a logit model, following Hefetz and Warner (2004) and González-Gómez et al. (2011), who analysed the transaction cost of privatisation and the privatization water services, respectively.

The dependent variable used is a dummy variable that takes the value 1 if the privatisation contract is renewed and 0 otherwise. With this model, we estimated the probability of a municipality deciding to renew the service. Table 3 shows the descriptive statistics obtained for the variables included in the model to study their influence on renewal decisions.

Table 3. Descriptive Statistics

Variable	N	Mean	p50	Min	Max	SD
Renewal	1802	0.06492	0	0	1	0.24646
Category1	1802	0.25915	0	0	1	0.43829
Category2	1802	0.43118	0	0	1	0.49537

Category3	1802	0.20033	0	0	1	0.40036
Category4	1802	0.10932	0	0	1	0.31213
Duration	1802	7.75788	3	0	75	11.59592
Liquidity	1802	1.454811	0.73541	-0.00679	20.75794	2.85199
NFBRI	1802	1.03624	1.03157	0.68280	1.41188	0.13964
Threepost	1802	0.26970	0	0	1	0.44392
Twopost	1802	0.22031	0	0	1	0.41457
Pol. orientation	1802	0.41564	0	0	1	0.49297
Pol. strength	1802	0.50277	1	0	1	0.50013
Population (log)	1802	4.72773	4.71948	3.14363	6.51388	0.83164
Industry	1802	2.23595	1.54653	0.26267	12.72995	2.12305
Tourism	1802	2.68589	0.85586	0	46.37627	6.89872

Results

Table 4 shows the results obtained from the logit model, on the basis of which we developed a risk model for the renewal of public service contracts for the period 2002-2013. The model developed for this study contains variables reflecting contract characteristics, together with financial, political and socioeconomic variables.

This model is based on the risk rate, which is relatively easy to interpret, assuming that a value greater than 1 corresponds to a positive effect on the risk rate, and that a value of less than 1 reflects a negative impact on the risk rate.

Table 4. Factors affecting privatisation contract renewal for local public services

Variable	Coefficient	Robust Standard Error^a	Odds Ratio
Category 1	0.95244*	0.42561	2.59204
Category 2	0.72742*	0.39586	2.06974
Category 3	0.80901*	0.42663	2.24569
Duration	-0.07960*	0.03157	0.92347
Liquidity	-0.00799	0.04003	0.99236
NFBRI	-1.16573*	0.69876	0.31169
Political orientation	0.56683**	0.22024	1.76268
Political strength	0.53591**	0.20151	1.70900
Threepost	0.17245	0.24340	1.18822
Twopost	0.22279	0.26439	1.02253
Population (log)	0.55390***	0.13639	1.74003
Industry	0.13018***	0.03689	1.13904
Tourism	-0.01711	0.03157	0.98302
cons	-5.38439	1.16627	0.00458

Pseudo R²: 0.0814
Wald chi² (11): 51.18^b
Prob > chi²: 0.0000
Number of observations: 1802

^a Robust (White) Standard errors.
*p<0.1; **p<0.05; *** p<0.01

Regarding Hypothesis 1, according to which contract renewal is influenced by service complexity, we observed the variables corresponding to the characteristics of these contracts and found that service complexity does have a significant and positive effect in all cases. These results are consistent with those obtained by Brown and Potoski (2003), Carr et al. (2009) and Rodrigues et al. (2012), who concluded that contract complexity influenced the decision to privatise local authority services. With regard to the types of services, those which have most influence on the probability of contract renewal are the Category 1 services (water, waste collection and treatment, street cleaning and the maintenance of parks and gardens). Category 2 services (management education, training centres, cultural activities, sports, social services, etc.) also have a positive effect on the risk rate, as do the Category 3 services (urban transport, bus stations, public works, land development, parking). In short, Hypothesis 1 was found to be satisfied for all types of services, except Category 4, which was then excluded from the model. The results obtained, thus, are consistent with those of Rodrigues et al. (2012).

Continuing with the variables relating to contract characteristics, the results obtained show that contract duration has a negative and significant effect on the rate of risk, i.e. the longer a contract lasts, the less likely it is to be renewed. Accordingly, Hypothesis 2 is rejected. This finding is contrary to what had been expected, in view of the study by González-Gómez and Guardiola (2009), on municipal water services, who concluded that over time, the likelihood of privatisation increased. In consequence, a longer contract duration was expected to increase the likelihood of renewal.

We also analysed the influence of certain financial factors on the contract renewal decision. The first indicator of financial stress in our analysis was liquidity; this factor was not found to influence contract renewal, and therefore Hypothesis 3 is rejected. Our results presented no statistical significance, unlike those obtained by Zafra-Gómez et al. (2014). However, in relation to Hypothesis 4, regarding the possible relation between the budget deficit and contract renewal, we found that this variable was significant and negatively associated with the risk rate; thus, an increase in the budget surplus reduces the likelihood of contract renewal, and hence an increase in the deficit increases the likelihood of renewal. Accordingly, Hypothesis 4 is accepted, corroborating the results obtained by Zafra-Gómez et al. (2014).

Political variables are addressed in Hypotheses 5, 6 and 7. According to the first of these, progressive parties are less likely to renew privatisation contracts for the provision of public services. However, we found that the progressive government had a positive and very significant effect on the risk rate, and therefore this hypothesis must be rejected. These results contradict the widely accepted association between privatisation and conservative government (Bel and Fageda, 2007; Bastida et al., 2012). On the other hand, the results obtained for Hypothesis 6, related to political strength, lead us to accept this hypothesis, since this variable had a very significant and positive effect on the risk rate. Thus, our study presents empirical evidence that political strength is an explanatory factor in the renewal of contracts for public services, in the same line as Ashworth et al. (2005), who observed a relation between political fragmentation and public debt.

With regard to Hypothesis 7, on the influence of political cycles on the likelihood of privatisation contracts being renewed, the results obtained do not confirm the presence of political cycles, in contrast to previous findings (Bastida et al., 2013; García-Sánchez et al., 2014). However, the sample period of three election events may have

been insufficient to determine their influence, which would account for the non-significance of this variable in our results. Nevertheless, Hypothesis 7 must be rejected.

Finally, the control variables, i.e. the socioeconomic factors considered, also produced significant results. The population size had a positive and significant effect: the larger the municipality, the greater the likelihood of the privatisation contract being renewed. These results are consistent with those obtained by Zafra-Gómez et al. (2016). The industry sector index was also associated with contract renewal, and in the same direction, i.e., the higher the index of industrial activity in the municipality, the greater the likelihood of contract renewal. However, the index of tourism-related activities had no influence in this respect.

Conclusions and discussion

Traditionally, studies of whether public services should be provided via a particular form of management have examined whether privatisation leads to increased competitiveness, greater economies of scale, improved efficiency or a better financial condition. However, no conclusive results have yet been obtained. In view of this uncertainty, together with the added effect of other contextual factors, such as the Great Recession, it has been suggested that the remunicipalisation, or reinternalisation of privatised services may be a feasible option. Indeed, in recent years, there has been a growing trend towards in-house management or reinternalisation (Hall et al., 2013). From the standpoint of governance, this shift may be influenced by the increasing complexity of society and the interdependence of public actors (Klijn, 2002).

The emergence of remunicipalisation highlights the need for a detailed reconsideration of the factors that may affect the renewal of municipal contracts with private operators, in order to identify the underlying causes of this process.

In view of these considerations, the main aim of the present study is to determine which factors influence the renewal of privatisation contracts, examining variables such as service complexity and contract duration, together with political factors such as the strength and political sign of the governing party and the impact of electoral cycles, and financial variables such as liquidity and the budget deficit.

The results obtained show that service complexity, measured by asset specificity and measurability, is relevant to the contract renewal decision. Thus, contracts for the provision of services whose control and measurement do not present special management problems are more likely to be renewed, even if they are subject to asset specificity. Such is the case of waste collection, water supply and urban services, as street repair (Categories 1 and 3). However, services that are more difficult to measure and which at the same time require very specific assets, such as social services (Category 2), are less likely to be renewed. In short, as regards the impact on contract renewal, service complexity is especially significant in terms of the relative ease or difficulty of measuring the quality of the service provided. Accordingly, it would be of great interest to analyse this complexity by distinguishing each of the service characteristics.

Other factors, such as political ideology, presented unexpected results. Previous studies had reported empirical evidence that progressive parties are reluctant to initiate privatisation processes (Zafra-Gómez et al., 2016). Nevertheless, our findings suggest that progressive parties, in fact, are more likely to favour contract renewal. However, it was not possible to verify the influence on contract renewal of political variables such as the presence of cyclical behaviour linked to electoral periods, possibly due to the scant

presence of electoral processes in the study period considered. For this reason, another interesting line of future research would concern the possible influence of political cycles on the renewal of privatisation contracts and/or on remunicipalisation.

In summary, our results show that in the context of Spanish local government there is a high probability that municipal contracts with private operators will be renewed. We present evidence that the explanatory variables of privatisation do not always act in the same direction as those of contract renewal. Accordingly, the factors that influence the latter decision may also be determinant in the current trend towards a remunicipalisation of public services. These remunicipalisation processes have been considered by Warner and Hefetz (2002), who measured citizen voice and privatisation and found that governments which engage in higher levels of privatisation pay more attention to measures of technical efficiency than to citizen voice.

In view of these considerations, future research in this field should be aimed at determining which other factors may explain the non-renewal of a privatisation contract and either the reversion of service management via reinternalisation (towards public entities, operating either alone or through intermunicipal cooperation) or, in some cases, the suspension of the service.

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Annex 1

Table 1. Matrix of correlations. a

	Renewal	Category1	Category2	Category3	Category4	Duration	Liquidity	NFBRI	Threepost	Twopost	Orientation	Strength	Popu (log)
Renewal	1												
Category1	-0.0017	1											
Category2	0.0207	-0.515***	1										
Category3	0.0032	-0.296***	-0.4358***	1									
Category4	-0.0346	-0.2072***	-0.305***	-0.1754***	1								
Duration	0.0998***	0.0545**	-0.1048***	0.1076***	-0.0483**	1							
Liquidity	-0.0176	-0.0212	-0.0283	0.0553**	0.0038	0.1486***	1						
NFBRI	-0.0376	0.0094	-0.0025	0.0217	-0.037	-0.0214	0.0962***	1					
Threepost	0.0175	-0.0455*	0.0011	0.0082	0.0516**	0.0837***	0.2612***	-0.082***	1				
Twopost	-0.0042	0.0126	0.0076	0.0016	-0.0318	-0.0568**	-0.0364	0.2348***	-0.323***	1			
Orientation	0.0337	0.0408*	-0.0363	-0.0283	0.0365	0.0732***	0.1111***	-0.0095	0.1091***	-0.0489**	1		
Strength	0.0548**	-0.0096	0.0142	0.018	-0.0322	0.0248	-0.0592**	-0.03	0.0792***	0.0734***	-0.1364***	1	

a. The continuous variables in the estimated model were subjected to an outlier treatment process, by the Winsorisation technique. This procedure was developed, inter alia, by Barnett and Lewis (1994) and Tukey (1962). With this technique, extreme values (upper and lower) are replaced by the closest values located below or above them.

Population (log)	0.0881***	-0.2395***	0.0582**	0.0851***	0.1347***	-	-	-0.0078	-0.0315	-0.0088	-0.1459***	0.011	1
Industry	0.0624***	0.0163	-0.0096	0.0158	-0.028	0.0737***	0.0776***	-0.001	0.0221	-0.0105	0.0063	-0.0232	-0.15
Tourism	-0.0318	-0.0204	-0.0701***	0.1089***	0.0002	0.0175	0.0088	0.0687***	-0.0285	0.011	-0.0714***	-0.0758***	0.010

*p<0.1; **p<0.05; ***p<0.01