European Business Organization Law Review 4: 429-451

Public-Private Partnership in Spanish Local Governments*

Lourdes Torres, Vicente Pina and Basilio Acerete**

Abstract

As in other European Union countries, Spanish local governments, by law and according to their population size, provide a number of basic services, which include the local police service, fire-fighting, refuse collection, street cleaning, land use control, urban transportation, social services, leisure and cultural activities, public works and town planning, slaughterhouses, central markets, housing, etc. Only the larger Spanish municipalities participate in the delivery of services such as education or health, which are under regional government responsibility. The vast majority of Spanish municipalities are very small. Recently, some Autonomous Communities have been establishing supra-municipal or district authorities (Comarcas), grouping several municipalities in order to manage the delivery of common local services.

Public-private partnership initiatives were introduced into Spain by the Municipal Services Act of 1955, which allows the provision of local services by private operators. This act was updated by the Public Contracting Act of 1995, which was recently amended to bring it into line with EU legislation. Spanish

---

* This study was carried out with the financial support of the Spanish R&D Plan, under research project SEC2001-2433.

** University of Zaragoza (Spain), Ftad de CC.EE. y Empresariales, Gran Vía 2, 50005 Zaragoza (Spain) e-mail: ltorres@unizar.es, Fax:+34-976 761769.

local governments have traditionally provided services using almost all PPP methods, such as local government corporations, concessions or franchises, lease of assets with or without additional investment, public-private ventures, associations with other local governments, public entities and non-profit organisations.

The results of our work on local service provision, set out in this paper, show a higher degree of PPP initiatives in medium-sized Spanish cities than in the rest. We find no statistical differences in the levels of efficiency observed in public and private urban transport operators. Finally, we observe both a need to update car park concessions in Spanish local administrations, incorporating mechanisms to increase efficiency, and an absence of homogeneity in these concessions because there is no unit that advises public authorities.

1. Introduction

In the 1970s, in comparison with other OECD countries, Spain had a small and unbalanced public sector, with major deficiencies in infrastructures and limited activities in the fields of the redistribution of wealth, welfare, health, education, and social and cultural services (Subirats, 1989). Social pressure for an improvement in the quality and quantity of public services and a better distribution of national wealth caused public expenditure to grow from 24.4% of GDP in 1975 to 45.5% in 1995. The growth in Spanish public expenditure brought about an increase in direct fiscal pressure, the improvement of public services in terms of both quantity and quality, the implementation of public welfare services and the development of major infrastructure projects. This rapid change in the size, goals and activities of the public sector took place with governmental and administrative structures that were not designed to manage a constantly growing volume of services and resources. So the modernisation of the governmental structure became an issue during the 1980s, and is an ongoing process to this day. In the 1990s, the Maastricht Treaty made it necessary to carry out major budgetary adjustments (to reduce the budget deficit to less than 3% of GDP and the public debt to less than 60% of GDP). They have also aroused interest in introducing management and control systems in order to improve efficiency and resource allocation in the public sector.

Territorial decentralisation, required by the Spanish Constitution, involves delegating authority to the people closest to those who use public services (McCaan, 1998). In the last twenty years, Spain has shifted from a highly centralised system to a territorial decentralized system with central, regional and local governments and could be considered as a *regional state*, in which the system tends to operate more like a federation than a centralised state. At the moment, regions manage more than 35% of total public sector expenditure.

This process of devolution tends to produce a division of powers in which central government retains control over policy-making and implementation in a few areas such as foreign policy, security (police and armed forces), fiscal and monetary policy (under European Union guidance), labour (unemployment and social security benefits), infrastructure (national roads, and waterways, ports and coasts) and criminal law, while in many other areas such as the health and education systems, public works, agriculture, environmental protection, regional development, social assistance, etc., central government remains only as a general policy-maker, setting the basis for the action of other authorities and ensuring that certain minimum standards are met. Implementation is then left to regions and municipalities.

All regions – 17 autonomous communities (*Comunidades Autónomas*) – have a similar institutional structure, with separate executive and legislative branches. Regional Parliaments are directly elected by the residents of the region. They have financial autonomy in order to guarantee an appropriate degree of freedom in performing their functions. The system gives the Autonomous Communities a certain degree of decision-making power over taxes. Regional revenue comes from regional taxation and funds transferred by the State. Territorial decentralisation in Spain does not come from the quest for greater efficiency, but has political origins. One criticism of this decentralisation process is that, in almost all cases, the regions have simply reproduced the bureaucratic structures that exist at central level.

The local level of government is sub-divided into provinces and municipalities, although provinces are often little more than administrative bodies for the delivery of support functions on behalf of municipalities. Spanish municipalities – 8,082 in number – are governed by a municipal council (assembly) of directly elected representatives who elect the Mayor from among themselves. The main sources of income for municipalities are taxation on property and businesses, charges for the costs of services, State grants and loans. The total expenditure of local governments represents about 13.5% of total Spanish public expenditure.

As we can see in Table 1, the vast majority of municipalities are very small, 93% having fewer than 10,000 inhabitants, and 60% fewer than 1,000. Some Autonomous Communities are establishing supra-municipal or district authorities (*Comarcas*), grouping several municipalities in order to manage and finance the delivery of common local services (92% of municipalities manage 24.7% of total local expenditure). For instance, the Region of Aragón, with 1,200,000 inhabitants, has about 800 municipalities which have been grouped in 33 district authorities for the delivery of services.

For the coordination of territorial devolution and to meet the budget deficit and public debt targets in the Maastricht Treaty, central government maintains a certain degree of involvement. The central government is seeking to retain

Table 1 Municipalities and population distribution[1]

MUNICIPALITIES

Inhabitants	*# of Municipalities*	*#Accumulated*	*Expenditure as % of Total*	*Expenditure Accumulated*
More than 1,000,000	2	2	14.46%	14.46%
From 500,001 to 1,000,000	4	6	7.04%	21.50%
From 100,001 to 500,000	49	55	21.95%	43.45%
From 50,001 to 100,000	55	110	9.06%	52.51%
From 20,001 to 50,000	176	286	13.27%	65.78%
From 10,001 to 20,000	309	595	10.05%	75.83%
From 5,001 to 10,000	519	1,114	8.91%	84.74%
From 3,001 to 5,000	474	1,588	3.93%	88.67%
From 1,001 to 3,000	1,593	3,181	6.41%	95.08%
Less than 1,001	4,901	8,082	4.92%	100.00%

some overall control over public expenditure and revenue in the face of growing regional and local resistance and calls for greater freedom of action. Recently, the central government passed the Budgetary Balance Act 18/2001 of 12 December, under which central, regional and local governments must balance their budgets without increasing the public debt.

2. Public-Private Partnership

Public-Private Partnership (PPP) reforms aim to push back the boundaries of the state and cut public spending. Whereas in many European countries public utilities such as water or electricity were transferred to the private sector during the 1990s, in Spain they have been managed under public-private partnerships for decades. PPP has been a frequent way of managing services in Spain. For instance, Spanish parents have the right to choose between free education for their children in public schools or in the majority of private schools, which fall under a special government agreement. In the health care field, civil servants can choose between the National Health Service or a set of previously selected

[1] Source: Ministry of Public Administration.

private health operators, without charge. However, the former could not be considered a market-type reform focused on the introduction of competition in the Spanish primary and secondary school system, but rather a way of financing private Catholic schools.

At local level, the competencies of municipalities are defined by the Local Government Act of 1985. By law local governments have to provide a number of basic services, according to their population size. They are similar to those delivered by other European Union cities and include the local police service, fire-fighting, refuse collection, street cleaning, land use control, urban transportation, social services, leisure and cultural activities, public works and town planning, slaughterhouses, central markets, housing, etc. Only the larger municipalities participate in the delivery of services such as education or health, which are under regional government responsibility (See Table 2).

At local level, the Spanish Municipal Services Act of 1955 allows the provision of local services by private operators. This act was updated by the Public Contracting Act of 1995, which has recently been amended to bring it into line with European Union legislation[2]. Spanish municipalities have been providing services under various PPP arrangements, which embrace, for example, all local services included in the UK's Compulsory Competitive Tendering initiative[3] and more recently in the Best Value approach.

In carrying out their activities, Spanish local governments may, in addition to directly managing public services, create enterprises in which they participate either fully or partially, constitute joint entities with private and public entities, externalise services, etc. Under PPP, a government entity remains fully responsible for the provision of the services in question and maintains control over management decisions while another entity manages or performs the service. This approach includes contracting out, the granting of franchises to private firms and the use of volunteers to deliver public services through non-profit organisations. The most common tools are:

– Government corporations – These are separate legal entities created by public entities, generally with the intent of conducting revenue-producing commercial-type activities, and are generally free from certain government restrictions related to personnel, procurement and public administrative procedures.

– Franchising – The local government grants a concession or privilege to a

---

[2] Royal Decree 2/2000, of 16 June. (Decision of the European Commission (1999/C 379/08), which was published in the Official Gazette of the European Communities No 379, of 31 December).

[3] Competitive Tendering can be viewed as a form of privatisation of service delivery (Kane, 1996).

Table 2 Public services provided by Spanish local governments

General Services	*Other Social Services*
Computer Services	Infant and youth care
Staff and administrative organisation	Kindergartens
Decentralised services	Consumer protection
Economic and financial services	Sport
Public protection and security	Social work
-Police	Shelters for the homeless
-Fire brigades	Home help
-Other emergency services	Services for elderly people
-Traffic control	Services for the disabled
Education	Social reintegration
State schools	Women's associations
Health	**Economic Activities**
Environment (pollution etc.)	Slaughterhouses
Food safety inspections	Central markets
Inspection of animal vaccinations	Public transport
Services to schools	Public car parks
Hospitals	Communications
Mental health	Swimming pools
Family planning centres	Management of assets
Health centres	Rates management
Rehabilitation	Economic development activities
Health education programs	Employment offices and training schemes
Public Works and Town Planning	Tourism
Funeral services and cemeteries	**Cultural activities**
Town planning	Street performers/performances
Street lighting and energy saving	Evening classes
Water supply	Music conservatory
Water purification	Libraries
Sewerage and drains	Museums
Road maintenance	Theatres
Street cleaning	Concerts
Refuse collection and disposal	Maintenance of historic buildings
Parks and gardens	**Housing**

private sector entity to manage a public service. The government may regulate the service level or price, but users of the service pay the provider directly.

- Public-private venture – Joint entities are a contractual arrangement between public and private sector partners. In such a partnership, public and private resources are pooled and responsibilities divided so that the partners' efforts complement one another. Such a venture, while a contractual arrangement, differs from typical service contracting in that the private sector partner usually makes a substantial cash-at-risk equity investment in the project, and the public sector gains access to new revenue or service delivery capacity without having to pay the private sector partner.
- Non-governmental organisations – Volunteer activities are conducted either through a formal agency volunteer programme or through a private non-profit service organisation. An activity in which volunteers provide all or part of a service and are organised and directed by a government entity can also be considered a form of outsourcing.
- Lease/Develop/Operate (LDO) or Build/Develop/Operate (BDO) – Under these partnership arrangements, the private party leases or buys an existing facility from a public entity, invests its own capital to renovate, modernise, and/or expand the facility and then operates it under a contract with the public entity. For example, in the USA[4], a number of different types of municipal transit facilities have been leased and developed under LDO and BDO arrangements.

In order to study the services delivered by the larger Spanish local governments, as well as the way in which those services are managed, we carried out a survey (Torres and Pina, 2001), focusing on municipalities with between 20,000 and 100,000 inhabitants, 100,000 and 500,000 inhabitants, and more than 500,000 inhabitants. The percentage of PPP initiatives in the first and third groups is around 33%, while the local governments of municipalities with 100,000-500,000 inhabitants show a higher degree of externalisation (44%). Nevertheless, the characteristics of local service externalisation in both groups are quite similar. The preferred methods for the different services are:

- management by the local government or a public entity for general services, education, health, social services, slaughterhouses and central markets and cultural activities;
- local government corporations for housing;

[4] GAO (1999) Public-Private Partnership. Terms related to Building and Facility Partnership.

- franchises and local government corporations for water supply, water purification, street cleaning, refuse collection and disposal, public transport, public car parks and, in some cities, slaughterhouses and central markets, kindergartens and social work;
- associations with other local governments for water purification, refuse collection and disposal, fire brigades, civil protection, social work, services for elderly people and social reintegration; and
- non-governmental organisations for social work, social reintegration and services for elderly people.

The higher percentage of externalisation and PPP initiatives in medium-sized Spanish cities could be explained by a lower management or public expenditure capability than in the larger cities, which encourages the shift to the private sector of those services financed by user charges or services whose users can be individually identified. Meanwhile, the provision of services in small cities is less complex, so they can deliver more services by themselves. Nevertheless, in almost all cases, the absence of evaluation in Spanish service provision prevents them from being benchmarked against the performance and efficiency of other authorities or private operators offering similar services.

2.1 **Public or private management of local services: the case of urban transport**

In order to test possible gains in efficiency from the collaboration of the private sector in the delivery of public services, Pina and Torres (2001) carried out a study comparing the efficiency of the public and private sectors in the provision of the urban transport services. This is a public service that receives subsidies to promote its use, but is susceptible to economic trends, and uses similar management techniques to those of the private sector. The study was commissioned by the Regional Audit Office of Catalonia in order to evaluate the efficiency with which the urban transport service is delivered (and other criteria) in the most important cities of this region.

In the Spanish urban transport system the service rights belong to the public administration, which usually contracts by tendering. The operators receive subsidies and the administration maintains full control over fares. Spanish local governments have traditionally provided urban transport services through local government-owned companies and concessions or franchises. The former are regarded in this study as public operators and the latter as private operators. The organisation of urban transport in Spain has been based on local government-owned companies in the major cities and concessions or franchises on a monopoly basis in medium-sized and small towns. The policy has usually been to maintain prices lower than costs, the difference being covered by public

subsidies. Local governments' political responsibility for service provision involves the fixing of prices and the maintaining of lines and kilometres that are not economically viable, as well as providing the conditions that guarantee all citizens access to the service. When a public service is delivered in a monopoly regime, the financial statements do not adequately reveal the efficiency with which the service is provided. Because of this, the franchise contracts usually include ratios and other indicators for reviewing prices, renewing investments, controlling the quality of the service, etc.

This study used the Data Envelopment Analysis model developed by Charnes, Cooper and Rhodes (1978), Banker (1984) and Banker et al (1989). This analysis technique has been applied since 1978 to evaluate the efficiency of non-profit entities. Seiford (1995) collected approximately 700 references on empirical applications of the DEA (Data Envelopment Analysis) technique. This method is especially suitable for evaluating the efficiency of non-profit entities that operate outside the market, given that in this framework the traditional measures of efficiency – income, profitability – do not work satisfactorily because these entities do not focus on obtaining profits and their main source of income is not the sale of goods and services.

The selection of inputs and outputs was carried out on the basis of their general acceptance by international and national departments concerned with the management of transportation, their application in Spanish franchise contracts and their widespread use in previous studies[5]. The input indicators used in this study are: Fuel/100Km (in litres), either Cost/Passenger or Cost/Km and Subsidies/Passenger. Output indicators used in this study are: Bus-Km/employee and Bus-Km (year)/bus as productivity indicators; Bus-Km (year)/inhabitant as a level of service indicator; and either Accident rate or Frequency as quality indicators; and Population as an indicator of the size of the city.

As can be seen in Table 3, the urban transport services of Barcelona, Sabadell, Tarragona, Lérida, Badalona, Hospitalet, Rubi, Igualada and San Cugat show an efficiency coefficient of 1, being comparatively efficient. The rest of the urban transport services studied do not achieve 1, indicating some degree of inefficiency.

In addition to the DEA, a regression analysis was carried out in order to determine the more meaningful causes of inefficiency. The indicators used in the DEA model mentioned above were taken as independent variables, along

---

[5] De Borger et al. (2002) carried out an extensive study of transit performance using frontier models, in which they analysed the methodology and conclusions of 40 surveys. These authors found a large degree of variability in the use of inputs and outputs, although many of them are based on kilometres, passengers, vehicles, employees and costs. Almost all the studies use different measures of operative costs as inputs and, on the output side, most of the studies use supply indicators such as vehicle-km or seat-km and demand for transit service indicators such as passenger-km or number of passengers.

Table 3 Coefficients of Technical Efficiency in DEA model (Pina & Torres, 2001)

	Type of operator	*Technical Efficiency*
Large		
Barcelona	Public	1
Medium-sized		
Sabadell	Private	1
Tarragona	Public	1
Tarrasa	Private	0.88
Lérida	Public	1
Mataró	Public	0.96
Badalona	Public	1
Hospitalet	Public	1
Small		
Rubi	Private	1
Gerona	Private	0.98
Igualada	Private	1
Sant Cugat	Private	1
Granollers	Private	0.92
Reus	Private	0.85
Manresa	Private	0.62

with other exogenous variables not controlled by urban transportation companies, such as whether the predominant activity in the city is industrial or concentrated on services, the geographical extension of the city, population density, number of cars, income per capita and the age of the population. We took the efficiency coefficients collected in Table 3 as the dependent variable. Table 4 shows the results of the multiple linear regression.

As can be seen in Table 4, the independent variables that best explain the efficiency of the urban transport services analyzed were: Cost/passenger, Fuel/100km, and Km/bus – two inputs and one output. In all cases the *Beta* coefficients were as expected, positive for the indicator of output and negative for the indicators of input. The R^2 obtained is sufficiently high to conclude that the variables with a significant "t" have a meaningful influence on the efficiency level of the urban transport service of the cities studied. In the efficiency

Table 4 Regression analysis (Pina & Torres, 2001)

	Beta standardised	*t*
(Constant)		11.64*
INPUTS		
Cost/Pass.	-0.79	-5.10*
Fuel/100Km	-0.56	-3.67*
OUTPUT		
Km/Bus	0.54	3.65*
	R^2 0.77	R^2 corr 0.72

*Sig. at 0.025

analysis applying the DEA model, as well as in this analysis, the population was not shown to be a meaningful factor in explaining the efficiency or inefficiency of a particular urban transport service.

Km/bus is a productivity indicator that shows the utilisation of the productive investment no matter what the size of the city. Transportation companies have complete management capacity over this indicator. An excess of investment, such as Levaggi (1994) found, would be a factor of inefficiency.

Cost/passenger is considered one of the most important efficiency indicators, together with the consumption of Fuel/100km. The first relates the activity to total costs, and the second to variable costs. The explanatory capacity of the inefficiency of these indicators shows that in fact the DEA model has classified as inefficient those urban transport services that have higher costs in relation to the activity carried out.

The environment variables did not at any rate prove significant. This is due to the fact that the cities studied have similar environment factors, reflecting their homogeneity and comparability.

The efficiency analysis described above was carried out without regard to whether the urban transport service was managed by a public or a private entity. The relationship between the efficiency of the management and the kind of service operator is therefore analyzed below.

The management of the urban transport service is corporatised in six cities that deliver the service by means of a public sector entity and nine that have transferred the management of this service to the private sector. Although, as we have seen earlier, medium-sized cities have the highest proportion of public-private partnership contracts, in the case of urban transport, local government-owned companies are the preferred option. In contrast, all small cities have chosen to franchise the urban transport service.

Table 5 Urban Transport Indicators (Pina & Torres, 2001)

VARIABLE MEAN

	Efficient	*Inefficient*	*Privatized*	*Public*
*Km/employee	20,782.44	17,752.17	21,114.78	17,253.67
Km/bus	52,645.44	43,722.83	47,908.78	50,827.83
Km/Inhab	11.74	6.73	7.39	13.25
*Inhabitants	332,156	89,015	83,543	461,935
Index of accidents	4.44	6.66	5.41	5.21
Frequency	28.18	24.71	31.03	20.44
*Fuel/100Km	45.45	49.11	43.63	51.85
*Subsidies/Passenger	46.80	54.27	59.43	35.33
Cost/km	311.85	339.50	300.78	356.11
Cost/Passenger	93.08	114.91	113.22	84.69

*Test "t", sig. at 0.05

In some cases, the mean values of the indicators used in the efficiency analysis shown in Table 5 are more favourable in the cities with public management, while in others, cities with a franchised service have more favourable values. It is not therefore possible to obtain sufficient evidence from a simple comparison of mean values. The application of the "t" test – for the difference between two means – to contrast the hypothesis of the independence of mean values, found evidence of statistical differences only in the variables Km/employee, Fuel/100Km, Subsidies/passenger and Population.

To test the hypothesis that there are significant differences between cities with a service managed by a public sector entity and cities with a franchised service, we applied the logit analysis, which did not introduce any variable to the model. It can therefore be concluded that the differences observed in the variables used do not explain whether urban transport services managed by a public entity are more efficient than those that are franchised.

A final attempt at classification was carried out by means of cluster analysis, but the groups of cities formed from the variables mentioned above did not distinguish between services managed by a public entity or franchised. Because of this, the efficiency or non-efficiency observed by the DEA model is not related to the kind of management – public or private – of the urban transport service in the cities studied. Hence, the conclusion is that private operators do not manage urban transport more efficiently than public operators.

3. Private Finance Initiatives

Another dimension of PPP is the introduction of private finance initiatives in some public sector fields where, for political and economic reasons, the externalisation of services is more complex. The Private Finance Initiative (PFI), introduced in 1992 in the UK, was designed to attract private sector finance for capital projects (Goldsmith and Page, 1997) and to exploit "the full range of private sector management, commercial and creative skills" (Private Finance Panel, 1995). One consequence has been to blur the outlines of the public sector. The most outstanding PFI tools in Spain are turnkey, free-standing projects, shadow toll, credit rights sale and government corporations (Torres and Pina, 2001).

– Turnkey – Under a turnkey arrangement, a public entity contracts a private investor/vendor to design and build a complete facility in accordance with specified performance standards. The private developer undertakes to build the facility for a fixed price and assumes the risk of meeting that price commitment, so it has to meet the financing requirements in advance. When the facility is completed, the public entity buys it from the private investor by means of a long-term debt. This method is known in Spain as "the German method".

The Royal Decree 704/1997 limits these contracts to projects aimed at building roads and railways and to hydraulic, coastal and environmental investments, with a cost of more than:

a) Roads: 24,000,000 euros,
b) Railways and hydraulic investments: 18,000,000 euros,
c) Coastal and environmental investments: 6,000,000 euros.

Give its effect on future budgets, a limit was placed on its use. The total amount invested per year must be less than 30 per cent of the total investment budget of the public entity. Turnkey has been applied since 1997 but it was suspended in 1999 and 2000 and it is not likely to be used during the 2003 budgetary year.

Royal Decree 704/1997 allows a maximum period of ten years to reimburse the debt. The European System of Accounts 1995, in force since 1999, obliges us to consider the long-term debt of these contracts as public sector borrowing when the facility is completed, which means that the public debt can not be divided up for subsequent years, which robs the system of one of its main advantages. Turnkey or the German method is not permitted for Spanish local governments.

Law 55/1999 allows private operators to extend their activities to the management of roads previously built under DBFO, BBO[6] and BOT/BTO[7] contracts and to be reimbursed through a system similar to the German method.

– Financially free-standing projects – This method was introduced in Spain by Law 8/1972. A private operator or a public-private venture designs, builds, and finances the infrastructure and manages the service. The operator recovers the cost of the investment through the direct payments of the service users. Motorways, bridges and tunnels have been built through this system of financing public infrastructures. This type of PFI has no impact on borrowing and public sector expenditure, although it must be monitored in the same way as any other outsourcing technique.

– Shadow toll – Known as DBFO (Design, Build, Finance and Operate) projects, the private sector designs, builds, finances and manages a public service. The private sector carries out the project and recovers the investment through the sale of services to the public sector, under the terms agreed in the contract. Its main characteristic is that the Public Administration pays for the service, not the public users.

The shadow toll is pending regulation at national level, although a bill about public works concessional contracts which will regulate this method is currently going through Parliament. Nevertheless, the shadow toll has been applied by some Autonomous Communities to finance infrastructures of regional importance. Two of the most important projects are the M-45 ring-road in Madrid and the Northwest motorway in Murcia.

---

[6] Buy/Build/Operate (BBO) – A BBO transaction is a form of asset sale that includes a rehabilitation or expansion of an existing facility. The government sells the asset to the private sector entity, which then makes the improvements necessary to operate the facility in a profitable manner.

[7] Build/Operate/Transfer (BOT) or Build/Transfer/Operate (BTO) – Under the BOT option, the private partner builds a facility to the specifications agreed by the public agency, operates the facility for a specified time period under a contract or franchise agreement with the public entity, and then transfers the facility to the agency at the end of that period. In most cases, the private partner will also provide some, or all, of the financing for the facility, so the length of the contract or franchise must be sufficient to enable the private partner to obtain a reasonable return on its investment through user charges.

At the end of the franchise period, the public partner can assume operating responsibility for the facility, contract the operations to the original franchise holder, or award a new contract or franchise to a new private partner. The BTO model is similar to the BOT model except that the transfer to the public owner takes place at the time that construction is completed, rather than at the end of the franchise period.

– Government corporations – Some Autonomous Communities have created government corporation operators[8] to implement infrastructures of regional importance. Similar corporations have been created to construct hydraulic infrastructures and the high speed railways. The regional government entrusts these corporations with the construction of a piece of infrastructure. They finance the operation and the public authority undertakes to reimburse the investment. These corporations are subject to business laws that permit more flexibility in the configuration and management of the infrastructure and the delivery of the service.

– Credit rights sale (securitisation)[9] – This is a DBFO method in which a public or private operator finances the investment by selling the credit rights contracted with the public authority to a financial institution.

This financial instrument has been explored by Autonomous Communities for financing government corporations, since ESA-95 compels them to recognize their debt as public sector borrowing. Regional authorities provide government corporations with credit rights, which can be sold to a financial institution in order to obtain funds to finance the investment. These credit rights are backed by the full faith and credit of the government. Then, the regional government reimburses the credit rights to the financial institution.

For example, MINTRA[10] was created to construct and manage new lines on the Madrid underground. This corporation is in charge of the performance of works in accordance with the transport policy of the Autonomous Community. Additionally, it will be in charge of running the new lines and awarding them to private operators who will pay royalties for the use of the infrastructure and corresponding equipment. MINTRA undertakes to pay the contractors as soon as the lines are running, which means deferring payment in a manner similar to the German method. Private contractors had to finance the initial investment, and European institutional banks and Spanish commercial banks offered to securitise their credit rights to MINTRA. This finance operation is backed by the autonomous administration, and MINTRA will not pay the private contractors, but the holders of the titles.

---

[8] Gestió d'Infraestructures, S.A. (GISA), Catalonia; Gestión de Infraestructuras de Andalucía, S.A. (GIASA); Areas de Promoción Empresarial, S.A. (ARPEGIO), Madrid; Gestión de Infraestructuras de Castilla y León, S.A. (GICALSA); Sociedad Pública de Investimentos de Galicia, S.A. (SPI); Gestión de Infraestructuras de Castilla-La Mancha, S.A.; Bideak-Bizkaiko Bideak, County Council of Vizcaya.

[9] RD 926/1998, 14 May, which regulates securitisation funds and societies managing securitisation funds (BOE 15 May 1998).

[10] Madrid Infrastructures of Transport.

3.1 **Private financing of public projects: the case of public car parks**

A key principle of PFI is to obtain the best value for money or the optimum combination of whole life costs (overall costs), quality, efficiency and effectiveness in delivering public goods and services. Value for money is a standard broadly used in Anglo-Saxon public management, although it is not clear if it has been put into operation outside this ambit. To determine if this standard has been applied by Spanish local authorities, we analysed the criteria considered in one particular type of PFI initiative: concessions to private operators to finance, construct and operate public car parks. In addition, we studied the consistency with which local authorities used concessions for delivering this service.

The survey was carried out using cluster analysis, whose objective is to classify a set of elements in mutually exclusive groups (clusters) according to similarities of elements. The resultant clusters must show internal homogeneity and external heterogeneity with the other clusters (Hair, et. al., 1998).

We focused on Spanish cities with more than 30,000 inhabitants and the data in the survey are the maximum scores (in percentages) of objective criteria used by local governments in public procurement procedures. These criteria represent the conditions that must be complied with in the final project. We identified eleven criteria in a total sample of 77 cities. The criteria and their groupings in terms of the different 'categories' of value for money – whole life costs, quality, efficiency, effectiveness – are shown in Table 6.

Table 6 Objective criteria used in public car park concessions

Category	*Criteria*
Whole Life Costs	*A.* Tariffs paid by users.
	B. Royalty paid to the local government.
	C. Duration of concession.
Quality	*D.* Characteristics of the infrastructure.
	E. Quantitative or qualitative improvements in service delivery.
Efficiency	*F.* Solvency (technical, economical, financial) of bidders.
	G. Financial balance of the project.
Effectiveness	*H.* Number of car parks.
	I. Performance term.
	J. Town planning settlement.
	K. Particular conditions[11].

[11] The Particular conditions criterion is not included in any category as it only appears in some cities.

The cities were grouped according to the extent to which they had assessed the identified criteria. Nine clusters were identified by means of a dendrogram generated by cluster analysis (see Annex 1). The average assessments of each criterion in each cluster are shown in Table 7.

Table 7 Average assessment (in percentages) of criteria in each cluster

		Whole Life Costs			*Quality*		*Efficiency*		*Effectiveness*			
	No of Cities	A	B	C	D	E	F	G	H	I	J	K
Cluster 1	14	**37.63**	**10.23**	4.80	9.81	3.66	**10.06**	1.61	7.08	8.95	3.33	2.84
Cluster 2	6	4.40	**10.90**	8.69	5.42	3.08	**18.86**	4.95	2.65	4.69	3.97	**32.39**
Cluster 3	9	**13.27**	**10.53**	4.42	**12.59**	1.18	**29.91**	3.06	**17.59**	6.44	0.00	1.01
Cluster 4	9	**12.86**	**11.90**	9.36	**39.79**	0.00	7.15	3.07	4.87	**10.14**	0.00	0.85
Cluster 5	13	**14.03**	**11.52**	3.21	**13.71**	5.32	5.00	0.84	6.44	**29.87**	8.89	1.16
Cluster 6	1	0.00	**20.00**	**20.00**	0.00	0.00	0.00	**60.00**	0.00	0.00	0.00	0.00
Cluster 7	9	7.97	**34.47**	7.16	**15.70**	1.78	7.53	5.08	1.84	8.34	9.01	1.11
Cluster 8	6	**15.77**	**20.77**	**14.10**	1.67	**27.40**	1.31	0.00	**10.00**	8.15	0.83	0.00
Cluster 9	10	8.91	**12.35**	7.10	**10.57**	**15.81**	**17.72**	3.10	0.61	**14.78**	5.51	3.54

These criteria cover specific elements of public car parks required to obtain optimum management and operation, so a balanced assessment of criteria is needed to achieve value for money in the service. For this reason a minimum value of 10% was set for a criterion to be considered sufficiently assessed by a local authority.

As we can see in Table 7, royalty paid by the concessionaire to the local government is the only criterion that is significantly assessed in all clusters. Tariffs paid by users, characteristics of the infrastructure and solvency of bidders are important too. The other criteria are barely relevant in more than two clusters.

None of the clusters stands out with respect to the number of cities included. Nevertheless, we can see that the largest groups comprise local governments that generally assess tariffs paid by users and performance term more than the other criteria.

In Table 8 we can see the appraisal of categories of value for money as the sum of the scores for the individual criteria (shown in Table 7) included in each one. We established 20% as the minimum percentage for a category to be considered meaningfully assessed by a local government.

The results confirm that there is no balanced assessment of the different categories, since in each cluster only whole life costs and one other category are

Table 8 Aggregation of assessment of criteria (in percentages) according to categories of value for money

	Whole Life Costs	*Quality*	*Efficiency*	*Effectiveness*
Cluster 1	**52.66**	13.47	11.66	19.37
Cluster 2	**23.99**	8.50	**23.81**	11.31
Cluster 3	**28.22**	13.77	**32.97**	**24.03**
Cluster 4	**34.12**	**39.79**	10.22	15.01
Cluster 5	**28.76**	19.04	5.83	**45.20**
Cluster 6	**40.00**	0.00	**60.00**	0.00
Cluster 7	**49.60**	17.48	12.61	19.19
Cluster 8	**50.64**	**29.07**	1.31	18.99
Cluster 9	**28.36**	**26.38**	**20.82**	**20.90**

adequately appraised, with the exception of *Cluster 9,* where we observe a balance between all categories and *Cluster 3,* where three are assessed to a significant degree.

Local governments are not consistent in using concessions for private management of public car parks, since it is not possible to obtain a small number of clusters. This absence of homogeneity can be attributed to the lack of coordination of private initiative in the Spanish public administration. In contrast to the United Kingdom and its Public-private partnerships Programme (4Ps) specifically bound to the local field, Spain has not developed units or programmes to guide public entities in getting the best value for money.

The value for money standard is not fulfilled either. There is no balanced assessment of the different criteria, nor of the categories that constitute value for money, within identified clusters. Similarly, each cluster is not composed of a large number of cities -it can be seen that in the largest groups criteria such as tariffs paid by users or performance term predominate over the others. Furthermore, matters referring to whole life costs are the sole criterion assessed significantly in each cluster to the detriment of the others which focus on the quality and effectiveness of the service.

Although, theoretically, PPP is designed to introduce efficiency in the management of resources and the delivery of goods and services, in the case of Spanish car park concessions this has not occurred. This can be explained by the fact that the value for money concept originated in Anglo-Saxon countries, whereas in Spain concessions do not yet reflect the new patterns that guide

relations between the public and private sectors in the management and delivery of public services and infrastructures.

3.2 **Accounting for PFI**

Accounting provides a means of giving transparency to PPP agreements and of keeping track of the responsibilities of the parties concerned, especially when public resources are involved.

In the United Kingdom, the accounting treatment of PFI has been the subject of debate. In general, a PFI contract implies that a private sector operator constructs a capital asset (road, bridge, hospital, prison, school) and uses that asset to provide services to a public sector purchaser. Key questions are (ASB, 1998):

- whether properties used in PFI contracts are assets and the amounts to be paid to operators are liabilities of the public authority or if, by contrast, the public authority only purchases a service; and
- whether the operator has an asset to deliver a service or if, by contrast, the operator has a financial asset which represents the amount of payment obligations owed by the purchaser.

The transfer of risks is a basic principle in PFI and a key element in determining the nature of the contract and the resulting accounting treatment. As a result, it is necessary to identify which party – private operator or public purchaser – is exposed to the risks and rewards of owning that asset and has to record an asset or a liability.

The Public Sector Accounting Standards Board (PSASB, 1999) of Australia is developing a standard for disclosure requirements that public sector reporting entities must comply with, in arrangements for the provision of public infrastructure. Initially, BOO[12] and BOOT[13] arrangements were identified as targets to account for. Now, however, the standard covers all kinds of arrangements for the provision of public infrastructure for a public sector entity or for the community on its behalf, by a private entity or another public sector entity. The principal disclosure requirements refer to rights and obligations arising under such arrangements, although the PSASB has not yet laid down requirements for recognition and measurement. This project is still in progress. The Territory of Victoria's PPP Unit, Partnerships Victoria, has also linked the accounting treatment of these contracts with the operating of finance leases under circumstances referring to the present value of payments – associated with the asset –

[12] Build/Own/Operate.
[13] Build/Own/Operate/Transfer.

risks, the duration of the contract and bargain basement provisions (Partnerships Victoria, 2001).

The International Financial Reporting Interpretation Committee has issued an Interpretation consistent with International Accounting Standards[14] concerning service concession arrangements. The Interpretation addresses what information should be disclosed in the notes to the financial statements of entities joined by an agreement under which an enterprise (concession operator) enters into an arrangement with another enterprise (concession provider) to provide services that give the public access to major economic and social facilities. The concession provider may be a public or private sector entity. Examples of service concession arrangements include public infrastructure and services.

As with the PSASB, this Interpretation only provides the disclosure requirements that both concession operator and concession provider must meet in each period. Recently the IASB established a research team comprising national standard setters from Australia, France, Spain and the United Kingdom to carry out a project entitled 'Accounting for Service Concession Arrangements'.

Public infrastructure financed and exploited by private sector entities are also considered in the European System of Integrated Economic Accounts (ESA95), which attempts to lay down criteria for adequately recognizing those arrangements in national accounts, assuming that there can be two objectives: to use the skills of the private sector to achieve greater efficiency and effectiveness, and to spread the cost of new assets over the time they are used to avoid the high initial costs on the government's budget. In the case of DBFO contracts, the key issue, as we have noted previously, is to determine whether an operation is a financing lease or an operating lease. To help in this, some questions related to factors that determine the kind of lease have been identified (Eurostat, 2002).

The entity involved in these operations can be private or public. In the latter case one must ascertain whether the corporation has been established for the purpose of financing, constructing and operating an asset which is made available to government for regular fees over the life of the asset. In this case it might be more appropriate to say that the fees are not sales but just transfers, as happens in most Spanish government corporations.

4. Conclusions

In Spanish local governments there has been a broadening and blurring of the 'frontier' between the public and private sectors characterised by the growth of public-private partnerships of various kinds, especially in specific services such

[14] SIC-29: Disclosure – Service Concession Arrangements; this is an Interpretation of IAS 1: Presentation of Financial Statements.

as public transport, public car parks, services for elderly people, sports, services for the disabled and women's associations. According to Torres and Pina (2002), externalisation has been used more extensively in services where a tendering process is easy to administer. There also seems to be a relationship between the type of service and the kind of operator chosen to manage it. Those involving the exercise of authority tend to be implemented by local governments. In social services, non-governmental organisations are the preferred option because they have a particular expertise in recruiting volunteers. In economic activities, the franchise is the most frequently used option because such activities are best performed by competing, profit-seeking organisations. According to Cohen (2001), understanding these sectoral distinctions is an essential step in developing a framework for deciding when and where to externalise.

One thing Spanish PPP initiatives lack is monitoring of compliance with the terms and conditions of the contract for service provision. Public sector reforms are eliminating the traditional channels of accountability that guarantee the protection of public service users. In almost all cases the failure to evaluate the results of service provision prevents benchmarking against the performance of other authorities or private operators offering similar services. The impact of competition on spending and efficiency is indeterminate and must be established empirically. According to Boyne (1998), studies which evaluate the effects of externalisation in local government are few in number, cover a limited range of services, and are methodologically flawed, so the public choice hypotheses on contracting are not directly supported or undermined by the empirical evidence[15]. For him, an ideal test of externalisation would be a cross-sectional research design in areas with and without externalised services in order to identify the net effect of competition.

The survey carried out by Pina and Torres (2001) compares the efficiency of public and private operators in the provision of the urban transport service in the main cities of Catalonia. This study did not find significant differences in the efficiency of services provided by municipalities or by private operators under voluntary competitive tendering processes. The complexity of urban transport management requires specific skills that large cities assume the responsibility for, while medium-small cities seem to find advantages in franchising such services.

---

[15] The only study which covers all eight of the compulsory competitive tendering services specified in the 1988 Local Government Act is Walsh and Davis (1993). Their results show that the expenditure reduction in refuse collection is higher than the average for other services, but in each service area there are examples of substantial cost increases as well as decreases, although – with the exception of street cleaning and catering – in the rest of the contracts studied the mean change in cost is negative.

Value for money is a key element in the configuration of PPP initiatives and appropriate tools must be used to achieve it. Our survey of car park concessions in Spanish local administrations shows the necessity of updating this method to incorporate mechanisms which permit the introduction of efficiency not only in the management of economic resources, but also in the delivery of public goods and services. Likewise, an absence of homogeneity is observed between local authorities in the application of this method, because in Spain there is no unit that advises public authorities.

We need to analyse the changing relations between the public and private sectors resulting from PFI in order to provide accounting information. The United Kingdom has developed an accounting treatment for PFI projects, and other accounting initiatives such as ESA95 are based on its experience. It would be a good thing if other approaches such as the Australian and IASB accounting projects did not limit their scope to disclosure, but included assessment and recognition aspects of PPP arrangements.

References

Accounting Standards Board (1998) *Amendment to FRS 5 'Reporting the Substance of Transactions': The Private Finance Initiative and Similar Contracts* (London, HM Stationery Office).

Banker, R.D. (1984) 'Estimating most productive scale size using data envelopment analysis', *European Journal of Operational Research* 17: 35-44.

Banker, R., Charnes, A., Cooper, W., Swarts, J. and Thomas, D. (1989) 'An introduction to data envelopment analysis with some of its models and their uses', *Research in Governmental and Nonprofit Accounting*, Vol. 5 pp. 125-163.

Boyne, G.A. (1998) 'Bureaucratic Theory Meets Reality: Public Choice and Service Contracting in US Local Government', *Public Administration Review, 58*, 6, pp. 474-84.

Charnes, A.W., Cooper W.W. And Rhodes, E. (1978) 'Measuring Efficiency of Decision Making Units', *European Journal of Operational Research* 429-444.

Cohen, S. (2001) 'A strategic framework for devolving responsibility and functions from government to private sector', *Public Administration Review, 61*, 4 pp. 432-440.

De Borger, B., Kerstens, K. And Costa, A. (2002) 'Public transit performance: what does one learn from frontier studies?', *Transport Reviews*, 22, 1, 1-38.

Eurostat (2002) *ESA 95 Manual on government deficit and debt* (Luxembourg, Office for Official Publications of European Communities).

Goldsmith, M.J. and Page, E.C. (1997) 'Farewell to the British State?', in J.E. Lane, eds., *Public Sector Reforms. Rationale, Trends and Problems*. 147-168.

Hair, J.F., et al. (1998) *Multivariate Data Analysis*, 5th ed. (Prentice Hall).

Kane, M. (1996) 'The nature of competition in British local government', *Public Policy and Administration*, 11, 3, 51-66.

Levaggi, R. (1994) 'Parametric and Nonparametric Approach to Efficiency: The Case of Urban Transport in Italy', *Studi-Economici*; 49(53), 1994, pp. 67-88.

Mccaan, W. (1998) 'The Business of People: a CEO's Perspective', *Canberra Bulletin of Public Administration,* 89, 120-127.

Partnerships Victoria (2001) *Practitioner's Guide* (Territory of Victoria, Australia, The Secretary Department of Treasury and Finance).

Pina, V. and Torres, L. (2001) 'Analysis of the efficiency of local governments services delivery. An application to urban public transport', *Transportation Research Part A*, 35, 10, 929-944.

Private Finance Panel (1995) *Private Opportunity, Public Benefit: Progressing the Private Finance Initiative* (London, HM Stationery Office).

Public Sector Accounting Standards Board (1999) Exposure Draft ED 100 '*Arrangements for the Provision of Public Infrastructure by Other Entities – Disclosure Requirements*' (Caulfield, Australian Accounting Standards Board).

Seiford, L. (1995) 'Data Envelopment Analysis: The Evolution of the State of the Art (1978-1995)', *The Journal of the Productivity Analysis*, Vol. 7 pp. 99-137.

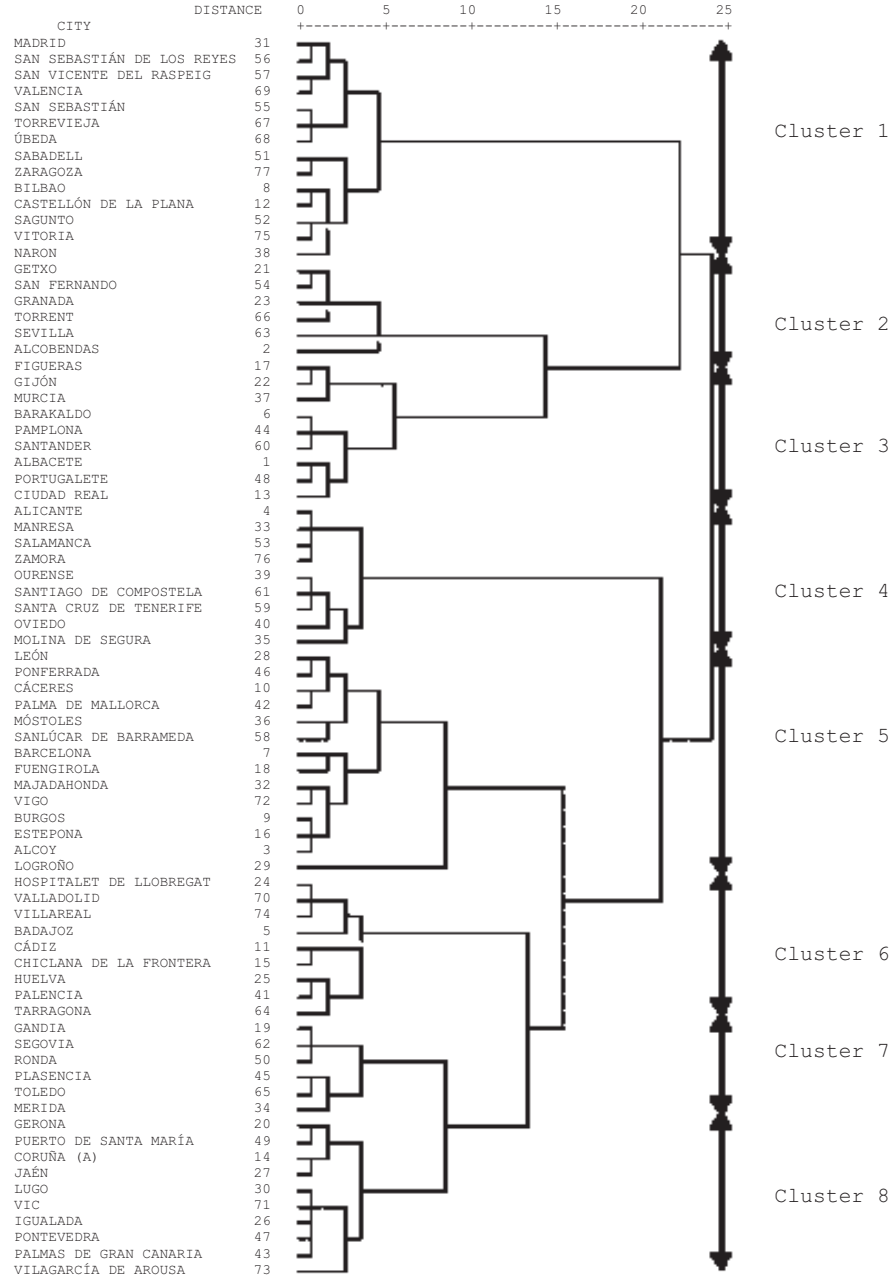
Subirats, J. (1989) *Análisis de políticas públicas y eficacia de la Administración* MAP.

Torres, L. & Pina, V. (2001) 'Public-Private Partnership and Private Finance Initiative in European Union Local Governments and Spain', *European Accounting Review* Vol. 10 nº3 pp. 601-619.

– (2002) Changes in Public Service Delivery in the EU countries *Public Money and Management* Vol. 22 nº 4 pp. 41-48.

Walsh, K. and H. Davis (1993) *Competition and Service* (London, HMSO).

Annex 1


DISTANCE
0
5
10
15
20
25
CITY
MADRID 31
SAN SEBASTIÁN DE LOS REYES 56
SAN VICENTE DEL RASPEIG 57
VALENCIA 69
SAN SEBASTIÁN 55
TORREVIEJA 67
ÚBEDA 68
SABADELL 51
ZARAGOZA 77
BILBAO 8
CASTELLÓN DE LA PLANA 12
SAGUNTO 52
VITORIA 75
NARON 38
GETXO 21
SAN FERNANDO 54
GRANADA 23
TORRENT 66
SEVILLA 63
ALCOBENDAS 2
FIGUERAS 17
GIJÓN 22
MURCIA 37
BARAKALDO 6
PAMPLONA 44
SANTANDER 60
ALBACETE 1
PORTUGALETE 48
CIUDAD REAL 13
ALICANTE 4
MANRESA 33
SALAMANCA 53
ZAMORA 76
OURENSE 39
SANTIAGO DE COMPOSTELA 61
SANTA CRUZ DE TENERIFE 59
OVIEDO 40
MOLINA DE SEGURA 35
LEÓN 28
PONFERRADA 46
CÁCERES 10
PALMA DE MALLORCA 42
MÓSTOLES 36
SANLÚCAR DE BARRAMEDA 58
BARCELONA 7
FUENGIROLA 18
MAJADAHONDA 32
VIGO 72
BURGOS 9
ESTEPONA 16
ALCOY 3
LOGROÑO 29
HOSPITALET DE LLOBREGAT 24
VALLADOLID 70
VILLAREAL 74
BADAJOZ 5
CÁDIZ 11
CHICLANA DE LA FRONTERA 15
HUELVA 25
PALENCIA 41
TARRAGONA 64
GANDIA 19
SEGOVIA 62
RONDA 50
PLASENCIA 45
TOLEDO 65
MERIDA 34
GERONA 20
PUERTO DE SANTA MARÍA 49
CORUÑA (A) 14
JAÉN 27
LUGO 30
VIC 71
IGUALADA 26
PONTEVEDRA 47
PALMAS DE GRAN CANARIA 43
VILAGARCÍA DE AROUSA 73
Cluster 1
Cluster 2
Cluster 3
Cluster 4
Cluster 5
Cluster 6
Cluster 7
Cluster 8