

PUBLIC-PRIVATE PARTNERSHIPS IN SPAIN: LESSONS AND OPPORTUNITIES

IE Business School Working Paper EC8-115-I

10-07-2007

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Resumen

Public-Private Partnerships (PPP), a “marriage” between public- and private-sector activity, have been employed for almost two decades as a “third way” to optimize the use of public funds and boost the quality of services traditionally provided by the public sector. Their use has spread from the United Kingdom to Europe and beyond, and has expanded from the transport sector to innovative projects in health, education and others.

Spain presents an interesting paradox in the history of PPP. Successive governments have seized on PPPs as a solution to budget constraints at a time of dwindling EU aid and stricter fiscal targets, making it one of Europe’s most enthusiastic users of PPP since 2003. Undoubtedly, this trend will bring benefits in terms of more abundant, lower-cost and higher-quality services. However, there are risks implicit in the way PPP is unfolding in Spain that could limit and even undo these benefits unless steps are taken to coordinate, monitor and follow up public-private projects and to communicate their virtues to the public.

Background

How can public services best be provided to a nation's citizens? The question is an old one that has become particularly pressing as governments have expanded and moved into new areas of activity. Much of the debate revolves around how the government can guarantee services to all citizens while minimizing costs and retaining incentives for high quality and on-time provision.

The formula PPP first emerged in the United Kingdom as an answer to this question, in the wake of the conservative revolution of Margaret Thatcher. Beginning in the early 1990s, the government began to explore avenues of co-production of public services with the private sector. PFI, as it was called in the UK (Private Financing Initiative) spread quickly across sectors and took various forms, depending on the exact role that each project assigned to the private and public sectors. The three main classifications that have emerged over time are summarized in Table 1 below.

Modality	Type
Type I: Variants of design-build-finance-operate where the private sector designs, builds owns, develops, operates and manages an asset with no obligation to transfer ownership to the government	<ul style="list-style-type: none"> • Build-Own Operate (BOO) • Build-develop-operate (BDO) • Design-construct-manage-finance (DCMF)
Type II: The private sector buys or leases an existing asset from the government renovates, modernizes and/or expands it and then operates the asset. The private sector has no obligation to transfer ownership back to the government.	<ul style="list-style-type: none"> • Buy-build-operate (BBO) • Lease-develop-operate (LDO) • Wrap-around-addition (WAA)
Type III: The private sector designs, builds and operates and then transfers the asset back to the government at some specified time. After transfer the private sector may rent or lease the asset from the government.	<ul style="list-style-type: none"> • Build-operate-transfer (BOT) • Build-own-operate-transfer (BOOT) • Build-rent-own-transfer (BROT) • Build-lease-operate-transfer (BLOT) • Build-transfer-operate (BTO)

Adapted from: International Monetary Fund, "Public-Private partnerships", March 2004.

What is unique about PPP in contrast to privatizations or traditional public procurement is that both the private sector and the government retain a role in this "marriage" during the life of the project. For the private sector, responsibility is not limited only to delivery of an asset, but to continuing provision of a service at acceptable quality levels over periods typically ranging up to 30 years. For the government, PPPs mean a level of involvement well beyond that of privatizations or even subcontracting or outsourcing, as the two sectors become long-term partners in the provision of high-quality services.

As PPP has broadened and expanded, a growing body of evidence has become available on what its benefits really are. The advantages in terms of higher quality or more

technologically advanced services are difficult to quantify. In terms of costs and on-time delivery, the picture is clearer. Two major surveys of PPP projects conducted by the British government¹ estimated average savings of 17% on the completed projects, due mainly to the avoidance of cost overruns in the construction phase. They also discovered that 80% of PPP projects had met their initial delivery time targets, compared to 20% for comparable public-sector projects². The reports concluded that the main source of the savings was that risks of delays or overruns had effectively been transferred from the public to the private sector. This effective reallocation of risks is the main benefit of PPPs and is the issue that must be addressed most effectively when PPP contracts are negotiated.

In addition to cost savings, PPPs offer other financial benefits to the governments that use them as an alternative to traditional public procurement. They allow governments to spread out the costs of a project and to pay for a service only as it is provided. This additional flexibility and the savings detailed above usually more than outweigh the higher costs of private-sector financing of projects. Beyond the financial benefits, PPPs also offer the obvious advantages of private-sector management and experience in designing, constructing and delivering services that are often complex and increasingly specialized, and outside the scope of public-sector experience. An added plus is that private-sector suppliers who factor maintenance costs into a project (which is normally the case) are likely to plan and design projects more effectively.

Besides the benefits outlined above, a striking lesson of the UK experience with PFI/PPP is that a new role for the public sector has emerged, piece by piece, as experience has progressed. Rather than abdicating responsibility for the provision of public services, as it might have done with privatization, through PPP the government has become a long-term partner with the private sector and assumed new management responsibilities. Again, the UK was a pioneer in recognizing, defining and implementing these new governmental responsibilities. It created a government unit dedicated to PPP that was active in providing advice to departments or governments that were contemplating private-sector involvement in public service delivery. It developed the Public-Sector Comparator, an interactive model that enables potential users of PPP to compare the cost of a project by public and private-sector providers, so that rational decisions can be made³. It drafted model contracts for different types of projects and encouraged small projects to consolidate under a single umbrella contract, to assist government units that had less experience with PPP and reduce the transaction costs involved in the bidding process. It developed an exhaustive list of the PFI projects undertaken throughout the UK, which made available to the public all relevant information on each project⁴. And it became active in following up projects in order to evaluate the performance of PPP and learn from its successes and failures.

As PPP became widely accepted and spread to new sectors and countries, the need to provide these services and develop public-sector management skills became an

¹ NAO 2001 and HM Treasury 2003.

² HM Treasury, "PFI: Meeting the Investment Challenge", Crown Copyright, July 2003.

³ See Treasury Taskforce Private Finance, *Technical Note n° 5: How to Construct a Public Sector Comparator*, October 1999, p. 17. An example of an interactive PSC developed by the Dutch government can be seen at <http://www.minfin.nl/PPS>.

⁴ See this list at Project database Partnerships UK:

<http://www.partnershipsuk.org.uk/projectsdatabase/projectshome.html>

international concern. The concern is especially pressing in countries undergoing major political and social change, such as developing countries and Eastern Europe. The PPP unit of the United Nations Commission for Europe has been active in outlining the responsibilities that governments should assume for good governance of PPP projects. Among these responsibilities are providing an adequate legal framework, informing citizens and maintaining transparent processes, ensuring a level playing field for potential bidders, avoiding corruption and defining and monitoring the performance of the private partners⁵. (An extensive list of these responsibilities is included in Appendix 1 of this paper, in the form of a proposed “scorecard” of how well governments are managing PPP.)

⁵ Governance in Public Private Partnerships for Infrastructure Development (Draft), Economic Commission for Europe, Committee for Trade, Industry and Enterprise Development, Working Party on International Legal and Commercial Practice (WP.5), October 2005.

The Spanish Experience with PPP

Spain was not a newcomer to PPP when projects involving cooperation between the public and private sectors began to spread in size and variety at the end of the 1990s. There are records of privately constructed highways in Spain in the 19th century, and former dictator Francisco Franco used a simple form of BOT successfully in the 1970s to construct numerous toll highways. It appeared natural for Spain to explore the PPP option under the conservative government that came to office in 1996, whose platform focused on deregulating and privatizing the economy.

The first PPP projects in Spain in the 1990s were in the traditional transport sector, particularly highways. The volume of these projects soared at the end of the 1990s (see Figures 1, 2 and 3 below). At the same time, their characteristics began to change: they spread to new sectors, beginning with health; and the contracting party shifted from the national government to the many (17) regional governments in Spain's decentralized system. (see Figures 4, 5 and 6 below) In 2005, the regional governments monopolized the PPP market in Spain, and projects were being negotiated and signed in waste management, construction of public buildings and especially health. In both volume and diversification, Spain in 2006 resembled the main EU countries that employed PPP; and it was a leading country in the EU in terms of project volume in 2003-2004 and 2004-2005 (Figures 7 and 8).⁶ Under the Infrastructure Plan unveiled by the PSOE in 2005, the government plans to obtain from the private sector 40% of a total financing of €241.4bn until the year 2020 for new and improved highways, railways, airports, ports and other infrastructures. This would be equivalent to about 0.5% of Spanish GDP per year until 2020, and would represent an unprecedented role for PPP in Spain that would make it a leader in Europe.

⁶ European PPP Report 2005, DLA Piper Rudnick Gray Cary

Figure 1

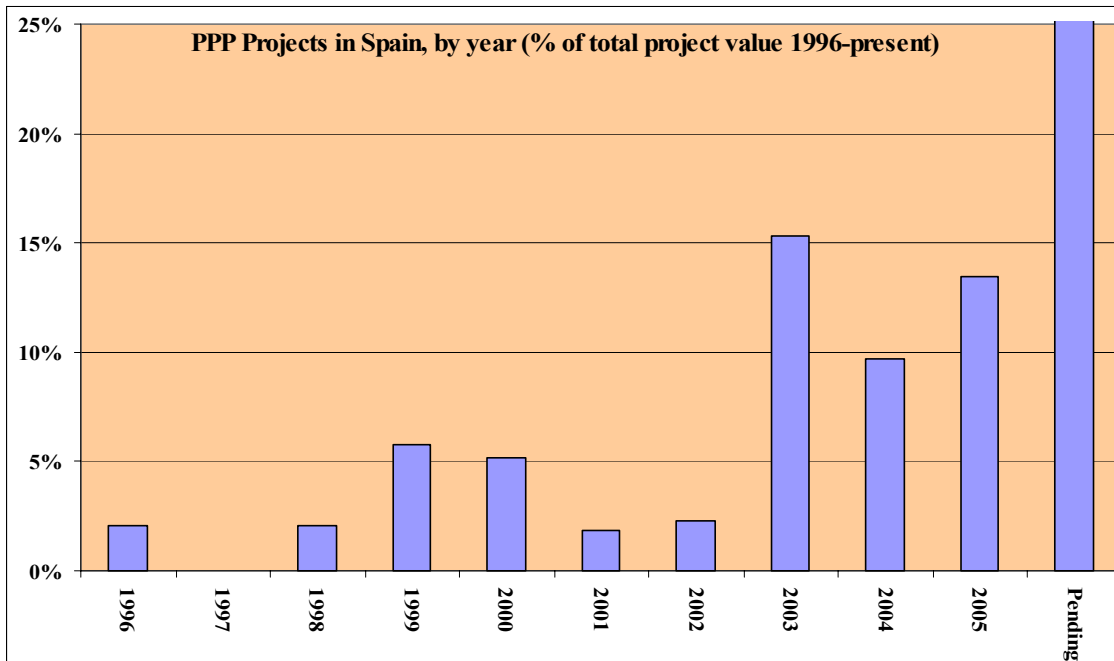


Figure 2

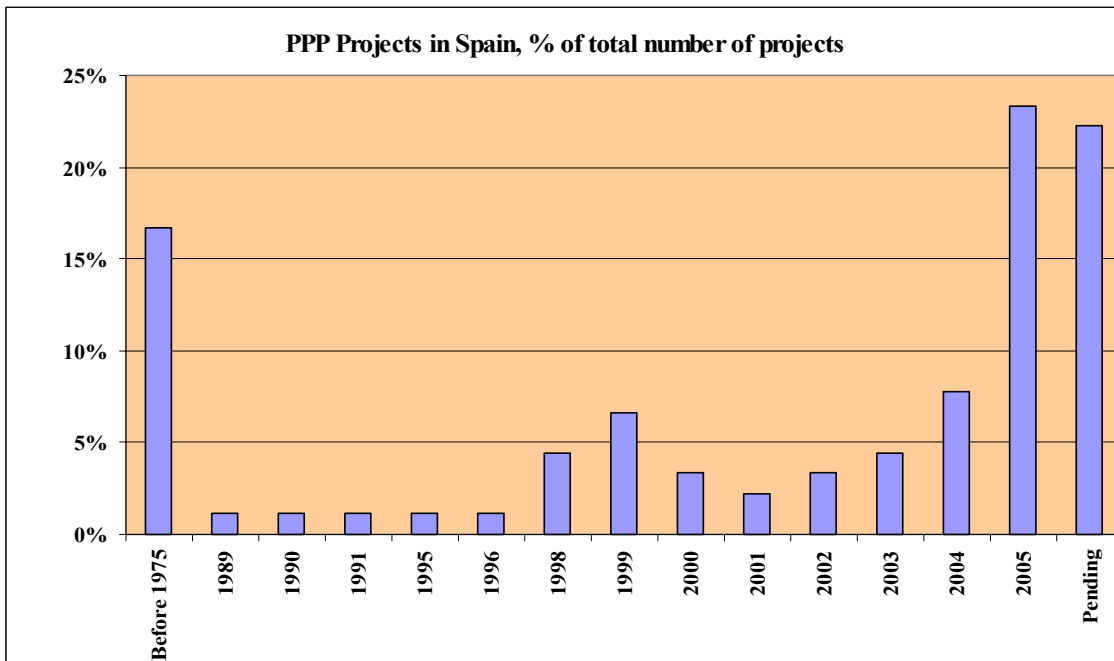


Figure 3

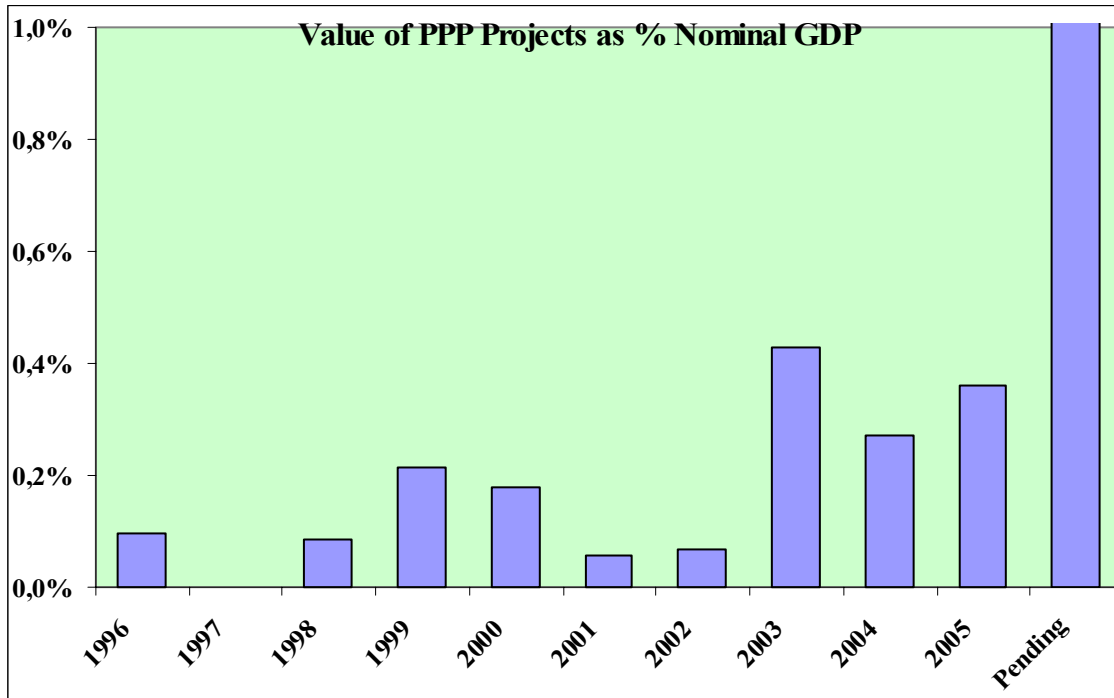


Figure 4

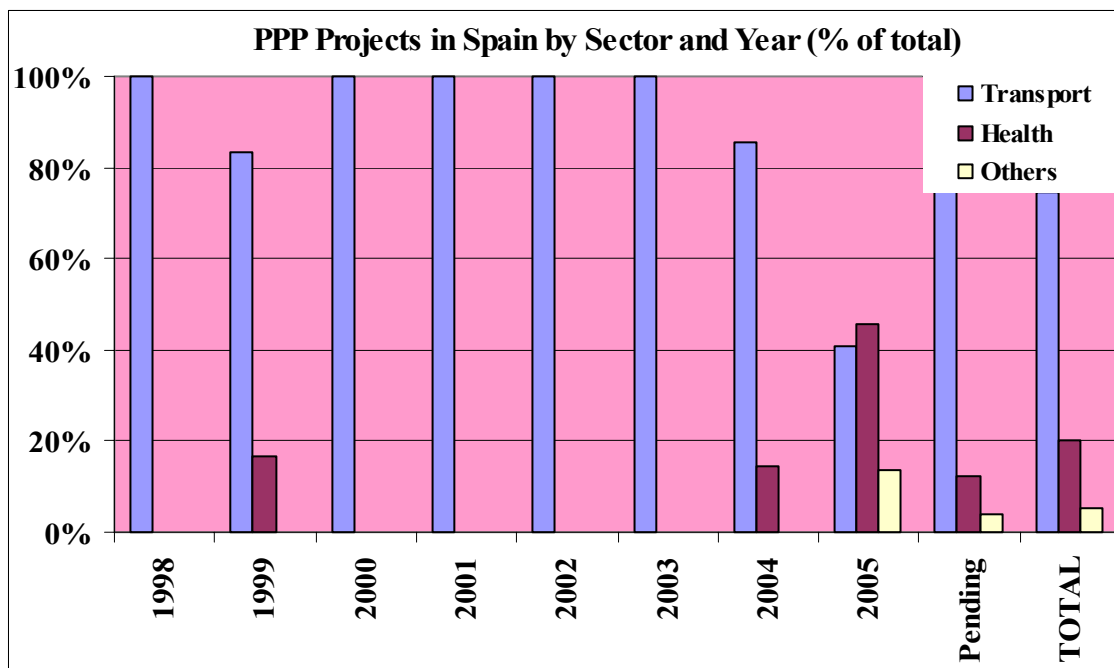


Figure 5

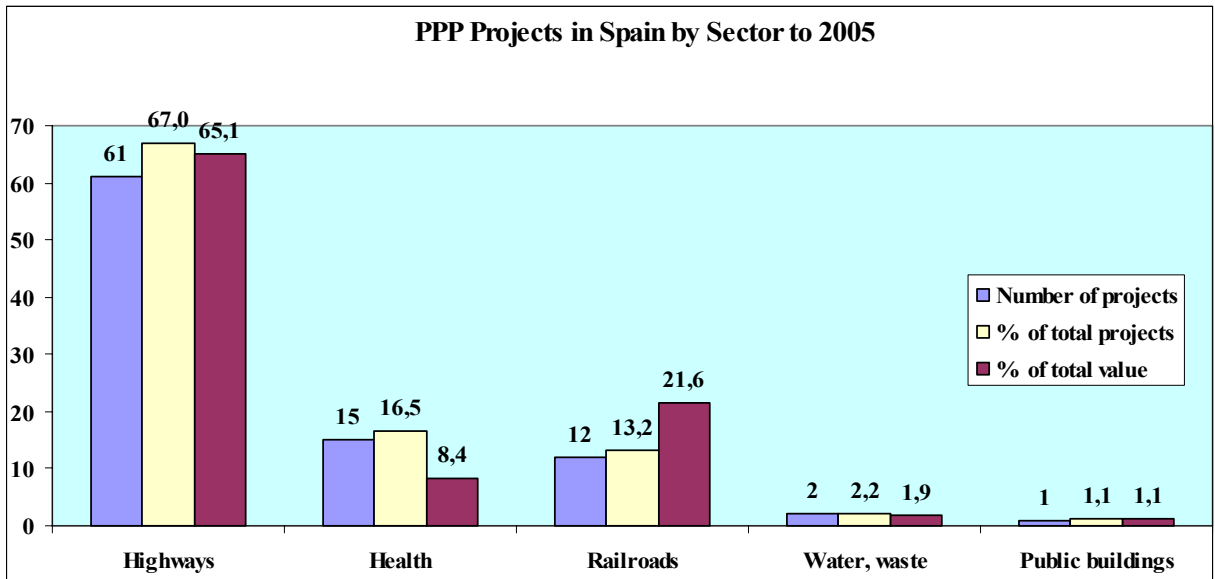


Figure 6

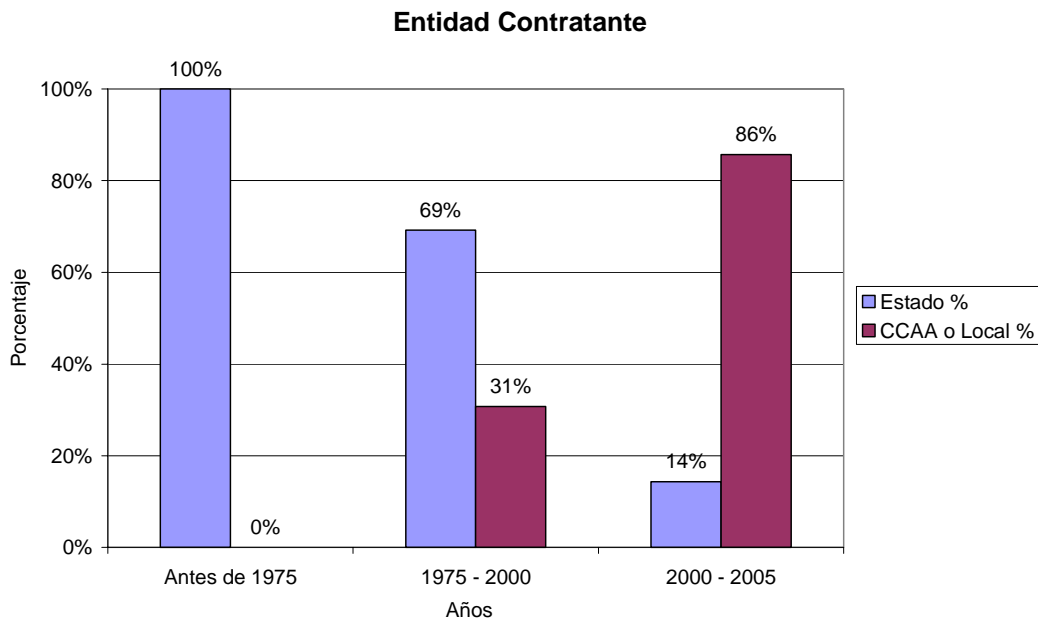


Figure 7

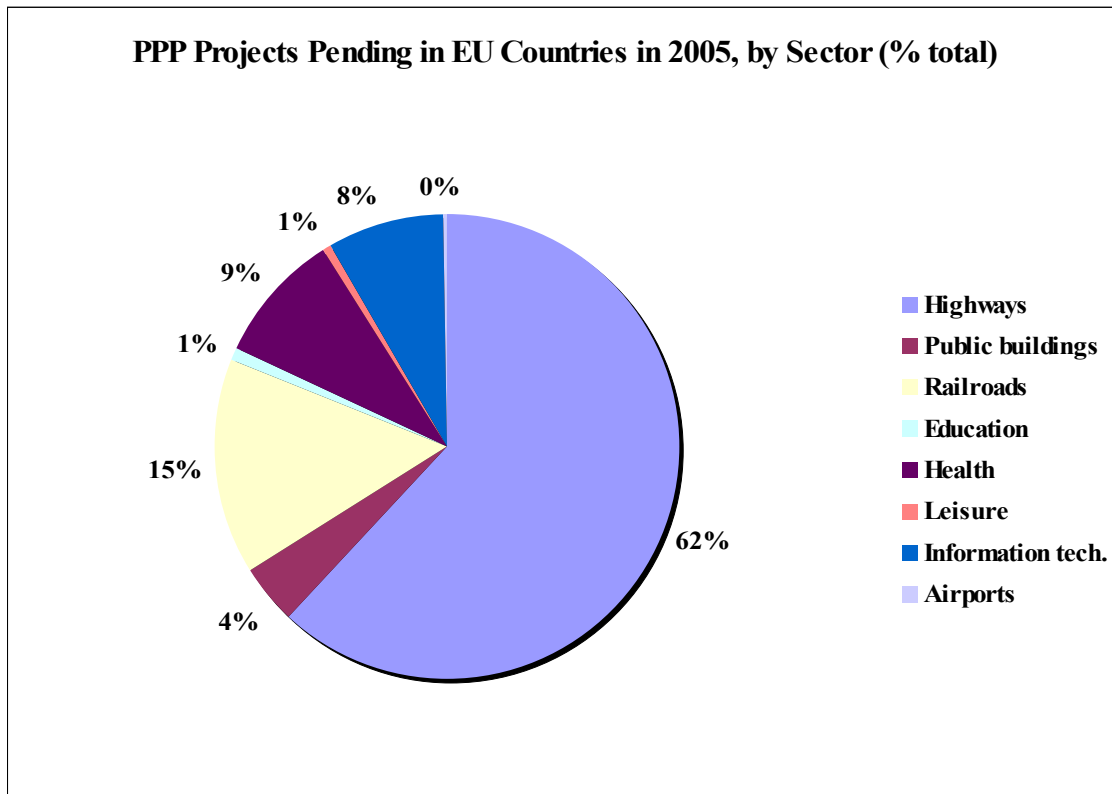
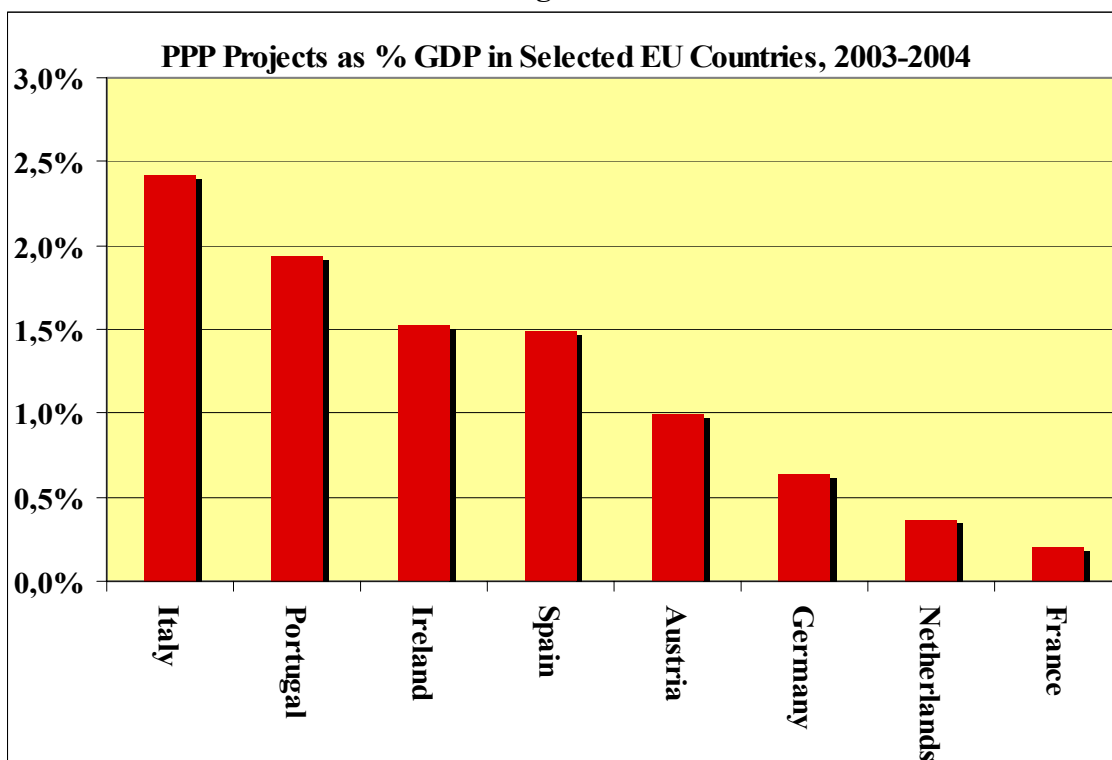


Figure 8



What has driven this explosive development of PPP in Spain? Undoubtedly, the Popular Party that governed Spain from 1996 to 2003 and currently governs many regions sympathizes with a view of PPP as the most efficient vehicle to deliver high-quality public services at lower cost, through the involvement of more efficient private

sector partners. However, on an official level this view has not been clearly and publicly articulated. This has led to confusion in the public debate over the meaning and content of PPP. Under the Socialist party (PSOE) that took office in 2003, use of PPP at a national level has accelerated, and the public discussion mentions only the advantages of obtaining additional private-sector financing.

It is significant that the surge in Spanish PPP projects coincides with 1) the Maastricht Treaty and the fiscal restraint demanded by its criteria for euro membership and 2) the expected drop in EU structural and cohesion funds to Spain following the enlargement of the European Union, which have been the source of financing for many Spanish infrastructure projects. It seems fair to say that the main force –and possibly the only one-- propelling PPP in Spain over the past decade has been to obtain additional financing at a time of budget constraints and need for improved infrastructures and services.

This exclusive emphasis on financing has conditioned the Spanish approach to managing PPP. Rather than articulating a strategy and supporting it with specific guidelines to obtaining value for money and negotiating acceptable contracts, the government's approach could be better described as a "hands off" search for private financing. At the time of this report, a specific PPP unit still did not exist in the Spanish government, making it unique among the European Union countries. Nor was there PPP-specific legislation, apart from the Infrastructure Law that was enacted in 2003 to regulate various aspects of privately funded projects. The government has not made model contracts available to its different ministries or levels of government, and no public-sector comparator has been developed or adapted that could be used to determine whether using the PPP formula for a project offered potential value for money. The Spanish government has not even made an official register of PPP projects available to citizens; in fact, the list given in Appendix 2, developed by the authors of this report, is the most comprehensive register developed in Spain. And at the date of this report, there had been no comprehensive official follow-up made available to the public of the many PPP projects undertaken in Spain, along the lines of the surveys described above for the UK. The Spanish government has relied almost exclusively on the market and private initiative to achieve the benefits of PPP for its citizens. It shows little evidence of having accepted its role as active public manager and partner in a new formula of provision of public services, along the lines set out by the UK or the UNECE guidelines for PPP governance.

What are the risks inherent in this approach to PPP, in contrast to the more "hands-on" British approach? Probably the main risk is that without a public-sector comparator or official support for negotiation of complex projects, there is no guarantee that PPP is the best alternative for provision of public services. The experience of the UK and other countries has demonstrated that PPP is not appropriate for all projects; and that there are times when full public provision of services is a more efficient approach. Choosing PPP without carefully contrasting the public and private costs for each project may turn out to be a more costly option for taxpayers and the final users of the services provided by PPP.

Added to this risk is the danger that PPP projects that are not carefully monitored may not fulfill the expected quality standards, or may experience cost overruns that are charged back to the public sector or to the final user. The Spanish bidding process has

been characterized by fierce competition for projects, which often result in aggressive pricing and discounts of up to 30% over the initial projected cost⁷. It seems evident that Spanish companies are eager to win these projects, which guarantee annual streams of income over long periods, and are willing to slash prices in order to do so. However, the implicit risk in awarding a contract to an underpricing bidder is that if the offer is too low and the company cannot cover costs, it will either deliver a lower-quality service than initially expected or pressure the government to renegotiate the contract at a higher price. Either option short-circuits the benefits from PPP.

The fact that Spain does not yet perform comprehensive follow-up or even maintain a central register of PPP projects underlines another risk inherent in the “hands-off” approach: that PPP projects may not be delivering value for money over the medium and long term, and the government is missing valuable opportunities to review its experience, correct errors and learn from its mistakes. As PPP activity decentralizes and accelerates at regional and local levels of government, authorities entering into complex negotiations may be doing so without the tools that are necessary to guarantee that the projects deliver value for money. Again, the risk inherent in this approach is either renegotiation at higher prices in the future, lower quality services or the inviability of projects over the medium and longer term.

Finally, in Spain there has been no official effort to inform the public on the motives for PPP and its potential benefits. In contrast to the efforts for transparency and effective communication of objectives and results in the UK, very little public relations effort has been associated with PPP in Spain at any level of government. The risk inherent in this failure to articulate and communicate a role for PPP is that employees involved in new projects or final users who do not see the benefits of private-sector provision may begin to voice their opposition to PPP. This would raise the risk of private investment in PPP projects, which could mean lower investor interest in new projects and higher costs. Again, the ultimate risk is that PPP will not deliver its potential benefits to taxpayers and users in Spain.

What can be done to avoid these risks? In light of the international experience and the particular characteristics of Spain’s history with PPP, the following changes would be important steps forward to guide the process in Spain:

1. A clear and specific framework should be elaborated for the PPP bidding process in Spain. This should include not only laws, which are largely adequate, but a public-sector comparator, model contracts for complex projects and steps to ensure that the playing field in Spain remains level and open to foreign bidders.
2. A PPP unit must be created at the national level to monitor, oversee and review projects, to ensure that their potential benefits are realized and communicated to the public.
3. The public sector must accept its management or “governance” role in PPP, along the lines envisaged by the UNECE or demonstrated by the governments of the UK and other countries that have utilized PPP.

⁷ Since the government does not maintain an official project register available to the public and details of biddings are not always publicly available, this is not an official figure but an estimate by Tecniberia-Asince, an industry association of engineering and consulting firms.

4. A strategic vision for PPP that crosses party lines should be elaborated by the government and communicated clearly to citizens. This would ensure continued support for projects and lend security to potential investors into the longer term.

PPP can be an asset or a potential liability to the governments that use it, depending on how successfully they are managed. Spain faces a significant public management challenge as PPP activity surges in all sectors and at all levels, and the way it responds to the challenge will determine whether PPP delivers its proven benefits to Spanish citizens in the form of lower-cost, higher-quality public services.

Selected Bibliography

- Abadie, R., & Howcroft, A. (2004). *Developing Public-Private Partnerships in New Europe*. Price Waterhouse Coopers.
- Allen, G. (2001). *The Private Finance Initiative (PFI)*. House of Commons Library. (Research Paper 01/117)
- Aparicio Mourelo, A. (2005). *Putting Transport Infrastructure at the Service of Sustainable Transport*. PPP in Spain SMI Conference Documentation.
- Arana, J. M. (2005). *Latest Developments in Spanish Road Financing*. PPP in Spain SMI Conference Documentation.
- Arthur Anderson and Enterprise LSE. (2000). *Value for Money Drivers in the private Finance Initiative*. Report commissioned by Treasury taskforce.
- Asian Development Bank Staff. (2000). *Developing Best Practices for Promoting Private Sector Investment in Infrastructure*. Asian Development Bank. Electronic preference formats recommended by www.Artery.org. Retrieved June 2005 from: (<http://www.artery.org/AtlanticSteel.htm>).
- Auriol, E., & Picard, P. (2004). *Privatizations in Developing Countries and the Government's Budget Constraint*. IDEI – Institut d' Economie Industrielle.
- Bartsch, C., Pepper, E., & Collaton, E. (1996). *Coming Clean for Economic Development: A Resource Book on Environmental Cleanup and Economic Development Opportunities*. Northeast – Midwest Institute.
- Bel, G., & Fageda, X. (2005). Is a mixed funding model for the highway network sustainable over time? The Spanish Case. Forthcoming in Ragazzi, G. i W. Rothengatter (Eds.), *Procurement & Financing of Motorways in Europe*. JAI press.
- BOT Expert Group. (1998). *Public-Private Partnerships: A new Concept for Infrastructure Development*. Economic Commission for Europe, United Nations Publication.
- Bousquet, F., & Fayard, A. (2001, September). *Road Infrastructure Concession Practice in Europe*. World Bank World Bank Institute: Governance, Regulation and finance division (Policy research working paper 2675).
- Brown, G. (2003). *Public Private Partnership in UK Roads Sector*. Halcrow, from http://ncppp.org/councilinstitutes/texas_presentations/brown.pdf
- Brusewitz, M. R. (2004/2005). Public-Private Partnerships in the United States (Electronic version). ProjectFinance Legal Advisors Review, 70-71.
- Caja Madrid. (2002). *Financing Transportation Infrastructure in Spain: Successful Schemes and Case Studies*. Caja Madrid - U.S. - Spain Forum on Transportation & Housing Finance.

- Carson, S. (1999). *Justifying Global privatization: Economics, Public Policy and Education*. ABAS Conference.
- Centro PWC & IE Sector Público, Instituto de Empresa, & PricewaterhouseCoopers. (2005). *Externalización de la Gestión y la Financiación del Sector Público en España*. Madrid: LID Editorial Empresarial, S.L.
- Claverley, J. (2005). *The business case: The healthcare infrastructure Programme of the Community of Madrid*. PPP in Spain SMI Conference Documentation.
- Colindres, R., & de Parias, C. (2004/2005). Autovía de Camino: First Monoline-wrapped Spanish Public Shadow Toll Road. *Euromoney Transportation Finance Review*.
- Cox, D., Moleenaar, K., Ernzen, J., Henk, G., Matthews, T., Smith, N., Willams, R., Gee, F., Kolb, J., Sanderson, L., Wited, G., Wight, J., Yakowenko, G. (2002). *Contract administration: Technology and practice in Europe*. Federal Highway Administration.
- Croome, C. (2003). *Private Finance Initiative and Public Private partnerships: What Future for Public Services*. Center for Public Services.
- De Luca, A. (2000). *An Economic and Financial Analysis of Public Private partnerships*. National Library of Canada.
- DH, Department of Health. (2002). *Good Practice Guide: Learning Lessons from post-Project Evaluation*.
- Demirag, I., Dubnick, M., & Khadaroo, I. (2004). A Framework for Examining Accountability and Value for Money in the UK's Private Finance Initiative. *Journal of Corporate Citizenship*, 15: 63-76.
- Department of Health Private Finance Unit. (2003). *PITN Guidance Notes (Version 2)*.
- DLA Piper Rudnick Gray Cary. (2002). European PPP Report 2002, from: <http://www.dlapiper.com/>
- DLA Piper Rudnick Gray Cary. (2003). European PPP Report 2003, from: <http://www.dlapiper.com/>
- DLA Piper Rudnick Gray Cary. (2004). European PPP Report 2004, from: <http://www.dlapiper.com/>
- DLA Piper Rudnick Gray Cary. (2005). *European PPP Report 2005*, from: <http://www.dlapiper.com/es/global/publications/detail.aspx?pub=1337>
- Dornan, D. (2001). *Abstract Asset Management – Management Fad or Prerequisite for solving the fiscal challenges facing highway infrastructure*. Infrastructure Management Group.

- ENA Infraestructuras, S.A. <http://www.ena.es/otrpoym.htm>
- European Commission. Directorate-General Regional Policy. (2003). *Guidelines for Successful Public-Private Partnerships*.
- European Commission. (2004). *Green Paper on Public-Private Partnerships*.
- Fatás Monforte, J.M., Magide Herrero, M., & Massó G. (2005). *Informe sobre Modelos de Cooperación Público-Privado para Financiación de Infraestructuras Públicas: Tratamiento en Términos de Contabilidad Pública (SEC 95) y Viabilidad Jurídica*. Price Waterhouse Coopers and Uria & Menéndez.
- Fayard, A. (1999). *Seminar on Public private partnerships (PPP's) in Transport Infrastructure Financing*. Paris: European Conference of Ministers of Transport.
- Ferrovial. (2002). *Privatization of Transportation Infrastructures Examples of Value Optimization*. US - Spain Forum on Transportation & Housing Finance.
- Finlay, D. (2003). *Keeping a Close Eye on PFI*. Government Opportunities: Facilitating Business with Government, de <http://www.govopps.co.uk>
- Gerrard, M. (2001). Public-Private Partnerships: What are public-private partnerships, and how do they differ from privatizations? *Finance and Development*, 38, (3).
- HM Treasury. (2003). *PFI: Meeting the Investment Challenge*. U.K.: The Stationery Office.
- HM Treasury. (2002). *Supplementary Green book Guidance Adjusting for Taxation in PFI vs PSC Comparisons*. Crown Copyright
- HM Treasury. (2004). *Standardization of PFI Contracts Version 3*. Crown Copyright.
- HM Treasury. (2004). *Value for Money Assessment Guidance*. Crown Copyright.
- Hospital Employee's Union. (2001). *Sustainability through Reform not Privatization: The Problem of Relying on the Private Sector for New Health Care Infrastructure Developments*.
- Instituto Nacional de Estadística (INE). <http://www.ine.es/>
- International Financial Services. (2003). *PFI in the UK: Progress and Performance*. PPP Brief.
- International Financial Services. (2003). *Private Public Partnerships UK Expertise for International Markets*.
- International Monetary Fund. (2004). *Public-Private Partnerships*.
- Jacobson, C., & Tarr, J. (1995). *Ownership and Financing of Infrastructure: A*

- Historical Perspective*. The World Bank . (Policy Research Working paper 1466).
- KPMG. (2003). *Module 2: Guide to the PPP Procurement Process*. KPMG LLP.
- Lopez Corral, A. (2002). *Spanish Experience in Supplying and Financing Infrastructures*. US / Spain Forum on Housing and Transportation Finance.
- Menendez, L. S. (2002). *Public/Private Partnerships and Innovation policy: The Spanish Experience*. Presented at Joint Mexico-OECD Conference on International Public/Private partnerships for Innovation.
- Middleton, N. (1999). *Public Private Partnerships – A Natural Successor to Privatizations*. PwC Global.
- Ministerio de Economía y Hacienda. (2005). Presupuestos Generales del Estado. Introducción y Estructuras Presupuestarias, from: http://www.igae.meh.es/Internet/Cln_Principal/
- Ministerio de Fomento. (2004). *Plan Estratégico de Infraestructuras y Transporte*, from <http://peit.cedex.es/>
- Ministerio de Hacienda – Instituto de Estudios Fiscales. (2004). *Informe y Conclusiones de la Comisión de Expertos para el Estudio y Diagnostico de la Situación de la Contratación Pública*.
- Ministry of Finance. PPP Knowledge Center. (2002). *Public Private Comparator*.
- Moreno, J. A., Pleite, F. (2003). Análisis de la Nueva Ley Reguladora del Contrato de Concesión de Obras.
- Moulton, L., & Anheier, H. (2001). Public-Private Partnerships in the United States: Historical Patterns and Current Trends. The Center for Civil Society. (Civil Society Working Paper 16).
- Neville, T. (2002). *PFI: Practical Perspectives*. ACCA: International Accountancy Body UK.
- NHS Trusts 2000 Buyer's and Commissioner's Guide. (2000). *Implementing the Private Finance Initiative, Dr. Courtney Smith from the NHS Information Authority Offers Some Tips*, from http://nhtrusts.com/pages_old/2000/feature_p69_01.htm
- Price Waterhouse Coopers and Uria & Menéndez. (2005). *Informe CEOE sobre Modelos de Cooperación Público – Privada para la financiación de infraestructuras Públicas*. Confederación Española de Organizaciones Empresariales.
- Private Finance Unit. (2004). *PITN Guidance Notes Version 2*.
- Rebollo Fuente, A. (2005). *PPP in Healthcare Models and Structures for the Spanish Healthcare & a Review on Upcoming Opportunities*. PPP in Spain SMI Conference Documentation.

- Rebollo Fuente, A. (2005). *Spanish Healthcare PPP: A Review on Structures and Opportunities*. PPP in Spain SMI Conference Documentation.
- Seader, D. (2002). *The United States' Experience with Outsourcing, Privatization and Public-Private Partnerships*. National Council for Public-Private Partnerships.
- Smith, C. (2000). *Implementing the Private Finance Initiative*. NHS Trusts 2000 Buyers and Commissioners Guide.
- Sturgess, G. (2003). *Competition: a Catalyst for Change in the Prison Service, a Decade of Improvement*. CBI – Confederation of British Industry.
- Treasury Taskforce Private Finance. (1999). *How to Construct a Public Sector Comparator*. (Technical Note n° 5).
- UK National Audit Office. (2003). *PFI: Construction Performance*. (Controller and Auditor General HC 371).
- UK Trade & Investment, International Financial Services London (IFSL), & British Consultants and Construction Bureau (BCCB). (2004). *How to Access UK Expertise in Public Private Partnerships. A Brief Guide from UK Trade & Investment* (Electronic version). UK: UK Trade & Investment.
- United Nations Institute for Training and Research (UNITAR), & Deutsche Management Akademie Niedersachsen (DMAN). (2001). *Public-Private Partnership for Sustainable Development*.
- United Nations. Economic Commission for Europe. (1998). *Public-Private Partnerships, A New Concept for Infrastructure Development*.
- United Nations Economic Commission for Europe. (2005). *Governance in Public Private Partnerships for Infrastructure Development (Draft)*.
- Utt, R. (1999). *How Public-Private Partnerships Can Facilitate Public School Construction*. Heritage Foundation.

Appendix 1

UNECE Scorecard for Successful Governance of PPP Projects by the Public Sector

Benchmarking						Score				
Transparency						1	2	3	4	5
Participation of citizens										
Consumers' organizations										
involvement in projects										
Media exposure										
Proposal of projects by civil society and/or NGOs										
Use of constitutional tools for decision-making process										
inclusion of referendum in the Constitution										
regularity of its use										
level of citizens' awareness of its existence and purpose										
Public Procurement										
Selective procedure										
General applicable law for all tender processes										
Specific laws according to the sector										
Harmonized rules under regional unification initiatives										
Corporate governance requirements										
Award procedure										
Tender appeal procedure										
Open Participation and non-discrimination										
Companies whose headquarters are not based in the country are successful in tender processes										
Early publication of tender offers in local and international newspapers										
Open competition rules										
Level playing field										
Good negotiation platform										
Expertise and dedication of negotiators										
Independence of judgment										

		Defined goals and objectives in the negotiation process							
		Coordination							
		Special governmental agency in charge of coordinating the project proposals and commencement of tender process							
		Web site information and on-line pre-registration							
		Organized data gathering							
		Centralized database with possible and actual contractors							
		Due diligence on the bidders' financial and technical performances							
		Contractors' registry							
		Qualification of contractors according to specific standards							
		Contractors' updated profile							
		Regular advertisement of status of contractors							
		Due authorization to grant permits, concessions or licenses							
		Legal delegation of authority to officials to sign on behalf of the government							
		Regulation about permits and/or licenses at a national level							
		Divulgence of information about granted permits, licenses and/or concessions							
		Strong anti-corruption measures							
		International level							
		Anti-bribery Convention							
		Ratification of the OECD Convention							
		Implementation of its requirements							
		Proposals in international for anti-corruption measures							
		Participation in specialized inter-governmental organisms for combating corruption							
		National level							
		Enforcement measures							
		Criminal law reforms							
		Anti-corruption independent Agency							
		Independency from all three powers (public, private and facilitators)							
		Publication of reports on corruption issues							

			Divulgence of information and reports						
			Educational programs						
			Criminal prosecution						
			Rate of prosecuted cases						
			Rate of sentences imposing imprisonment and economic penalties on defendants						
			PPP unit						
			Creation of legislation						
			Amount of projects presented to Legislative body						
			Amount of proposed bills passed by Legislative Body						
			Existence of specialists taskforce						
			Diversity of specialists backgrounds						
			Independency						
			Identification of projects						
			Updated database of possible projects						
			Frequent contacts with private sector and civil society						
			Project "hunting"						
			Private initiatives and/or unsolicited offers						
			Right to challenge						
			number of times used						
			results						
			Education and dissemination of information						
			Special programs at different levels to disseminate information on PPPs						
			Access to media						
			Publications						
			Organization of conferences, seminars and/or workshops on related topics						
			Issuance of guidelines and advisory notes						
			Publication						
			Advertisement						
			Measure of performance						

		Ad campaign							
		Elaborate web page							
		Amount of consults registered in the website							
		Amount of people who know of the existence and assigned tasks of the Unit							
		Dispute Resolution							
		Contractual level							
		Easy dispute mechanism on interpretation and application of clauses							
		Frequency							
		Clear arbitration clause							
		Choice of law clauses							
		Existence of a choice of forum clause							
		Post-contractual period							
		conflict prevention							
		Flexibility							
		Consultation with independent experts							
		Use of mediation							
		Permanent team of experts assigned to solve conflicts							
		Participation of consumers							
		Extended use of class action							
		Instauration of consultation procedures							
		Performance of Ombudsman							
		Public accountability							
		Public servants' responsibility							
		Awareness for the consequences of their decisions							
		Appointment based on merits and open election							
		Presentation of personal financial statements							
		Definition of civil torts regarding public officials' performance							
		Criminal and civil prosecution for irregularities on PPPs projects							
		Level of citizens' scrutiny and participation in the appointment process							

	Accounting and auditing								
	Clear accounting treatment of assets involved in PPPs								
	Off-balance sheet allocation								
	Definition of ownership of assets								
	Risk assessment								
	Risk assumption by the private sector								
	Independent auditing								
	Participation of independent auditing firms selected by transparent, open procurement.								
	Independent permanent auditor assigned to the project and/or SPV								
	Reports directly to PPP unit								
	Performance of private company								
	Performance and output milestones definition								
	Stepped or banded thresholds								
	Involvement of experts in stepped or banded thresholds analysis								
	Trigger of payments based on performance assessments								
	Tax								
	Tax advantages								
	Tax reduction according to investment								
	Progressive elimination of tax burdens								
	Elimination of double-taxation irregularities								
	Sustainable development								
	Long-term infrastructure goals								
	Inclusion of PPP policy in national program								
	Creation of PPP Unit								
	Legislation								
	Assignment of PPP projects in national and/or state budget								
	Outline of comprehensive national infrastructure projects								
	Clear definition of sectorial goals								
	Special treatment to problematic and/or urgent national infrastructure needs								

	Annual plans and programmes								
	Publication of plans								
	Access to media								
	Education programs at all levels (primary, secondary and university)								
	Feasibility studies								
	Technical								
	Financial								
	Profitability study								
	Commercial development								
	Sustainability								
	Compromise of private sector for long-term projects								
	Financial performance of private sector in social infrastructure								
	Public control								
	Value for money								
	Contracts								
	Good design of agreements								
	Broad choice of contracts that better suit the needs of the project								
	Creative definition of covenants								
	Flexibility during the life of the contract								
	Publicity and Education								
	Expansion of knowledge on PPPs								
	Diversification								
	Level of understanding of citizens about the key elements of a PPP project								
	Access to media								
	Polls among users and consumers on performance of the private company								
	Polls to measure public's satisfaction with the service								
	Safety and Security								
	Specialized Safety and Security agency								
	Performance								
	Instauration of preventive measures								

			Level of spread of information related to security measures							
			Periodic exams in the project							
			Strong insurance policy							
			Regulation of insurance market							
			Existence of covenants in agreements							

Source: Governance in Public Private Partnerships for Infrastructure Development (Draft), Economic Commission for Europe, Committee for Trade, Industry and Enterprise Development, Working Party on International Legal and Commercial Practice (WP.5), October 2005.

Appendix 2
PPP projects in Spain

Nombre del proyecto	Sector	CCAA	Dependencia	Valor €M	Fecha	Concesionario	Estado del proyecto	Notas
Alicante - Cartagena	Carreteras	Valencia / Murcia	Estado		1998 (a)	Ausur	En servicio	77 km, Peaje (BOT)
Tarragona - Valencia A-7	Carreteras	Valencia / Cataluña	Estado		Anterior a 1975 (c)	Aumar	En Servicio	225 km, Peaje (BOT)
Valencia-Losa del Obispo, CV-35	Carreteras	Valencia	CCAA	450	2005 (a)	UTE Sacyr-Nagares-Secopsa	Pendiente el contrato	Valor de construcción - 450 M€, Peaje en Sombra
Variante de Alicante	Carreteras	Valencia	Estado	445	2004 (a)	Ciralsa	Pendiente el contrato	Valor de construcción - 445 M€
Hospital Valencia - Alcira	Sanidad	Valencia	CCAA	123	1999 (en servicio)	Ribera Salud, UTE - Aldesas	En Servicio	Valor de Construcción 123 M€
Hospital Denia	Sanidad	Valencia	CCAA	97	2005	UTE - DKV	En Construcción	Valor de Construcción 97 M€
Hospital Torreveja	Sanidad	Valencia	CCAA	70	2004	UTE - Necso y Enrique Ortiz e Hijos	En Construcción	Valor de Construcción 70 M€
Hospital de Manises-Quart	Sanidad	Valencia	CCAA		2005 (l)	Sin determinar	Pendiente el contrato	
Valencia - Alicante	Carreteras	Valencia	Estado		Anterior a 1975 (c)	Aumar	En servicio	149 km, Peaje (BOT)

Hospital Son Dureta	Sanidad	Palma de Mallorca	CCAA	778	2005 (I)	Sin determinar	Pendiente el contrato	778 M€ (licitación)
Palma - Manacor	Carreteras	Palma de Mallorca	CCAA	116	abr-04	Sacyr Vallehermoso y las sociedades mallorquinas Melchor Mascaró, Aglomsa, Matías Arrom Biblióni, Electro Hidráulica y Obras y Pavimentos Man	En construcción	116 inversión prevista - Peaje en Sombra
Túnel de Soller	Carreteras	Palma de Mallorca	Estado		1990	Tunel de soller	En servicio	3 km, Peaje (BOT)
Autopista Eibar - Vitoria	Carreteras	País Vasco / Navarra	CCAA	721	Varios tramos - EIB funding close Abril 2005	BIDEGI, SA, Vias de Alava, SA	En Construcción	Valor de construcción - 721 M€
Bilbao -Zaragoza	Carreteras	País Vasco / Aragón	Estado		Anterior a 1975 (c)	Avasa	En servicio	294 km, Peaje (BOT)
Bilbao - Behobia	Carreteras	País Vasco	Estado		Anterior a 1975 (c)	Concesión terminó en 2003	En servicio	115 km, Peaje (BOT), ahora tiene contratos de servicio bajo el gobierno local
Tudela - Irurzun	Carreteras	País Vasco	Estado		Anterior a 1975 (c)	Audenasa	En servicio	113 km, Peaje (BOT)
Túnel de Artxanda	Carreteras	País Vasco	Estado		1998	Artxanda Tuneles	En servicio	5 km, Peaje (BOT)

Pamplona-Estella-Logroño Autovia de Caminos	Carreteras	Navarra / La Rioja	CCAA	324	2000/2001 (a)	Autovía del Camino, S.A.	En construcción con varios tramos abiertos	Valor de construcción - 324 M€, Peaje en Sombra
Medinaceli-Soria-Tudela	Carreteras	Navarra / Castilla y León	Estado	631		Sin determinar	Pendiente el contrato	Valor de construcción - 631 M€
Zona regable del Canal de Navarra	Agua	Navarra	CCAA	408		Sin determinar	Pendiente aprobación	Inversion total 600M€
Cartagena - Vera	Carreteras	Murcia / Andalucía	Estado	526		Sin determinar	Pendiente el contrato	Valor de construcción - 526 M€
Segovia-San Rafael	Carreteras	Madrid / Castilla y León	Estado	102	2001	Castellana de Autopistas/ Iberpistas	En servicio	Valor de construcción - 102 M€, Peaje
Madrid - Ocaña, R-4	Carreteras	Madrid / Castilla La Mancha	Estado	598	2000 (a)	Autopista Madrid-Sur	En servicio	Valor de construcción - 598 M€, Peaje
Madrid - Guadalajara R-2	Carreteras	Madrid / Castilla La Mancha	Estado	409	2000 (a)	Henarsa	En servicio	Valor de construcción - 409 M€, Peaje
Madrid - Toledo	Carreteras	Madrid / Castilla La Mancha	Estado	400		Sin determinar	Pendiente el contrato	Valor de construcción - 400 M€, Peaje

M-30	Carreteras	Madrid	CCAA	2458	2003 (a); varios tramos	Varios Tramos - OHL, CORSAN / CORVIAM, UTE SANDO / PLODO, ALDESA, UTE Ortiz / Ogensa, SACYR, UTE NEXO / Ferrovial, UTE Dragados/FCC,	En construcción	Valor de construcción - 2458 M€
Madrid-Arganda y Madrid - Navalcarnero, R-3 y R-5	Carreteras	Madrid	Estado	841	1999	Amsa - Accesos madrid	En servicio	Valor de construcción - 841 M€, Peaje
M-45 Various Tramos	Carreteras	Madrid	CCAA	487	1998; varios tramos	Concesiones de Madrid, Autopista Trados-45, Autopista Trados-45	En servicio	Valor de construcción - 487 M€, Peaje en sombra
Autopista Eje Barajas	Carreteras	Madrid	Estado	328	2002 (a)	Eje Aeropuerto	En construcción	Valor de construcción - 328 M€, Peaje
Majahonda Hospital	Sanidad	Madrid	CCAA	256		Bovis Lend Lease	En construcción	Valor de construcción 256 M€
Ruta de Pantanos M-503	Carreteras	Madrid	CCAA	100,7	1999 (a)	Acciona	En servicio	Valor de construcción - 100,7 M€, Peaje en Sombra

Hospital - Valdebernado Sur	Sanidad	Madrid	CCAA	98,7	2005	Begar y Ploder en consorcio con Idissa, Vectrinisa, Fuensanta y Cantoblanco	Pendiente el contrato	Valor de construcción 98.7 M€
Hospital - San Sebastián de los Reyes	Sanidad	Madrid	CCAA	98,2	2005	Acciona, S.A y Crespo y Blasco, S.A	Pendiente el contrato	Valor de construcción 98.2 M€
Tranvía de Parla	Transporte	Madrid	CCAA	93,5	2005 (a)	UTE que han FCC y Acciona	Pendiente el contrato	Valor de construcción - 93,5 M€
M-407, en Fuenlabrada	Carreteras	Madrid	CCAA	70,3	2005 (a)	FCC Construcción	Pendiente el contrato	Valor de construcción - 70,3 M€, Peaje en Sombra
Hospital - Jarma - Coslada	Sanidad	Madrid	CCAA	66,7	2005	Sacyr, S.A, Testa Inmuebles en Renta, S.A. y Valoriza Facilities, S.A.U	Pendiente el contrato	Valor de construcción 66.7 M€
Hospital - Los Conejeras	Sanidad	Madrid	CCAA	64,4	2005	Sacyr, S.A., Testa Inmuebles en Renta, S.A. y Valoriza Facilities, S.A.U	Pendiente el contrato	Valor de construcción 64.4 M€
Hospital - Valdecipreste	Sanidad	Madrid	CCAA	49,3	2005	FCC Construcción y OHL aliados	Pendiente el contrato	Valor de construcción 49.3 M€

Hospital - Montaña de Aranjuez	Sanidad	Madrid	CCAA	43,3	2005	Sando, Hispánica y la empresa de instalaciones Inabensa	Pendiente el contrato	Valor de construcción 43.3 M€
Hospital Valdemoro	Sanidad	Madrid	CCAA	132	2005 adjudicación	Capio y Ghesa	Pendiente el contrato	132 M€ inversión
M-203 Madna	Carreteras	Madrid	CCAA	131	No	Sin determinar	Pendiente el contrato	131 M€, Peaje en Sombra
Tenerife Tranvia	Rail	Las Canarias	CCAA	226	2004	Metropolitano de Tenerife	En construcción	228 M€
la autovía del Barbanza	Carreteras	Galicia	CCAA	109		Sin determinar	Pendiente adjudicación	Limite de licitación - 109 M€, Peaje en Sombra
Santiago-Brión	Carreteras	Galicia	CCAA	103,2	2005 (a)	UTE - Dragados, Extraco y F. Gómez	Pendiente el contrato	Valor de construcción - 103,2 M€, Peaje en Sombra
La Autovía del Salnés	Carreteras	Galicia	CCAA	40,6	2005 (a)	Copasa, Puentes y Calzadas y Caixanova	Pendiente el contrato	Valor de construcción - 40,6 M€, Peaje en Sombra
A Coruna - Carballo AG-55	Carreteras	Galicia	CCAA		1995	Autoestradas de Galicia	En servicio	
Puxeiros - Val Miñor AG-57	Carreteras	Galicia	CCAA		1995	Autoestradas de Galicia	En servicio	
Ferrol - Frontera Portugal	Carreteras	Galicia	Estado		Anterior a 1975 (c)	Audasa	En servicio	219 km, Peaje (BOT)

Santiago de Compostela - Alto de Santo Domingo	Carreteras	Galicia	Estado		1999 (a); 3 tramos	Acega	En servicio	57 km, Peaje (BOT)
Centro de mayores	Tercera Edad	Extremadura	CCAA	9	2005 (a)	INVERBLOIS, S.L	Pendiente el contrato	un derecho de superficie de 8.795 m2 (dos parcelas municipales) a 75 años
Vic-Ripoll	Carreteras	Cataluña	CCAA	220,6	Pendiente adjudicación	Sin determinar	Pendiente adjudicación	Valor de construcción - 220,6 M€, Peaje en Sombra
Vilanova - Manresa	Carreteras	Cataluña	CCAA	181,7	Pendiente adjudicación	Sin determinar	Pendiente adjudicación	Valor de construcción - 181,7 M€, Peaje en Sombra
Macanet - Platja d'Aro (Baix Empordà)	Carreteras	Cataluña	CCAA	61		Sin determinar	Pendiente adjudicación	Valor de construcción - 61 M€, Peaje en Sombra
Hospital del Baix Llobregat	Sanidad	Cataluña	CCAA	55	2005 (a)	Acsa Agbar Construcción, Emte, Teyco y 'La Caixa'	En Construcción	55 M€
Reus-Alcover,	Carreteras	Cataluña	CCAA	51,4	2005 (a)	Dragados Concesiones de Infraestructuras-Benito Arnó e Hijos SA	Pendiente el contrato	Valor de construcción - 51,4 M€, Peaje en Sombra

Barcelona - La Jonquera A-7	Carreteras	Cataluña	Estado		Anterior a 1975 (c)	Acesa	En servicio	150 km, Peaje (BOT)
Barcelona (Granollers) - Montmelo C-33	Carreteras	Cataluña	Estado		Anterior a 1975 (c)	Acesa	En servicio	14,1 km, Peaje (BOT)
Barcelona - Tarragona A-7	Carreteras	Cataluña	Estado		Anterior a 1975 (c)	Acesa	En servicio	100 kn, Peaje (BOT)
Castelldefels - El Vendrell	Carreteras	Cataluña	Estado		1992 / 1998 (i)	Aucat 2 tramos	En servicio	58 km, Peaje (BOT)
Montgat - Palafolls	Carreteras	Cataluña	Estado		Anterior a 1975 (c)	Acesa	En servicio	49 km, Peaje (BOT)
Montmelo - El Papiol A-7	Carreteras	Cataluña	Estado		Anterior a 1975 (c)	Acesa	En servicio	26,8 km, Peaje (BOT)
Terrassa - Manresa/Sant Cugat	Carreteras	Cataluña	Estado		1989 (en servicio)	Autema	En servicio	43 km, Peaje (BOT)
Tunel del Cadi	Carreteras	Cataluña	Estado		Anterior a 1975 (c)	Túnel de cadí	En servicio	30 km, Peaje (BOT)
Túneles de Vallvidrera	Carreteras	Cataluña	Estado		Anterior a 1975 (c)	Tabasa	En servicio	17 km, Peaje (BOT)
Zaragoza - Mediterráneo A-2	Carreteras	Cataluña	Estado		Anterior a 1975 (c)	Acesa	En servicio	215 km, Peaje (BOT)
Eje Llobregat	Carreteras	Cataluña	CCAA	240	Adjudicación 2005	FCC/ COPISCA/ CORNSA/ COPISA		240 M€, Peaje en Sombra
Cuitat de la Justicia	Las Cortes	Cataluña	CCAA	263	2005	Sin determinar	Pendiente el contrato	263 M€
Tranvía Barcelona Baix Llobregat	Rail	Cataluña	CCAA	217	2000	Tramvia Metropolità	En servicio	217 M€

Tranvía Barcelona Besós	Rail	Cataluña	CCAA	212	2002 adjudicación	FCC- Connex	En Servicio	212 M€
Burgos - Armiñón	Carreteras	Castilla y León / País Vasco	Estado		Anterior a 1975 (c)	Europistas	En servicio	84 km, Peaje (BOT)
Conexión A1/A68 Haro-Pancorbo	Carreteras	Castilla y León / La Rioja	Estado	99		Sin determinar	Pendiente el contrato	Valor de construcción - 99 M€
Leon - Campomanes	Carreteras	Castilla y León / Asturias	Estado		Anterior a 1975 (c)	Aucalsa	En servicio	78 km, Peaje (BOT)
Valladolid-Segovia	Carreteras	Castilla y León	CCAA	196	2006 (a)	Dos Tramos - Dragados, Cyopsa y Caja Duero - Sacyr Vallehermoso y Construcciones Lerma	Pendiente el contrato	Valor de construcción - 196 M€, Peaje en Sombra
Hospital de Burgos	Sanidad	Castilla y León	CCAA	163,8		Sin determinar	Pendiente el contrato	Valor de Construcción 163,8 M€
Autopista León - Astorga	Carreteras	Castilla y León	Estado	110	1999	Avelesa	En servicio	Valor de construcción - 110 M€, Peaje
Adanero -Villalba	Carreteras	Castilla y León	Estado		Anterior a 1975 (c)	Iberpistas	En servicio	28 km, Peaje (BOT)
Toledo-Ciudad Real	Carreteras	Castilla La Mancha	Estado	1382		Sin determinar	Pendiente el contrato	Valor de construcción - 1382 M€

Ocaña - La Roda	Carreteras	Castilla La Mancha	Estado	525	2004 (a)	Autopistas Madrid-levante	En Construcción	Valor de construcción - 525 M€, Peaje
Mantenimiento de carreteras Toledo Zona 1	Carreteras	Castilla La Mancha	CCAA	36,2	2006 (l)	Sin determinar	Pendiente el contrato	mantenimiento
Mantenimiento de carreteras Toledo Zona 2	Carreteras	Castilla La Mancha	CCAA	27,1	2007 (l)	Sin determinar	Pendiente el contrato	mantenimiento
Mantenimiento de carreteras Toledo Zona 3	Carreteras	Castilla La Mancha	CCAA	34,1	2008 (l)	Sin determinar	Pendiente el contrato	mantenimiento
Autovía los Viñedos Tramo 1 Suegra Tomelloso	Carreteras	Castilla - La Mancha	CCAA	170	2003 (a)	Construcciones Sarrión, Construcciones Gismero y Caja Castilla-La Mancha	En construcción	Valor de construcción - 170 M€, Valor total 295 Peaje en sombra
Autovía los Viñedos Tramo 2 Toledo (Mora) Suegra	Carreteras	Castilla - La Mancha	CCAA	136	2003 (a)	Dragados y Cyopsa		Valor construcción 136, Valor total 332 M€, Peaje en sombra
Centro de residuos	Residuos	Cantabria	CCAA	39	2005	Urbaser	Pendiente el contrato	39 M€
Ibiza Sun Antonio	Carreteras	Balearas	CCAA	70	No	Sin determinar	Pendiente el contrato	70 M€, Peaje en Sombra
Oviedo - Porceyo	Carreteras	Asturias	CCAA	129		Sin determinar	Pendiente adjudicación	Limite de licitación - 129 M€, Peaje en

								Sombra
Oviedo y Gijón	Carreteras	Asturias	CCAA	121	2005 (a)	Sacyr Vallehermoso	Pendiente el contrato	Valor de construcción - 121 M€, Peaje en Sombra
Autopista de Ebro	Carreteras	Aragón	CCAA	118	Fin 2005 (a)	Sin determinar	Pendiente el adjudicación	Valor de construcción - 80-118 M€, Peaje en Sombra
El Burgo de Ebro y Villafranca de Ebro	Carreteras	Aragon	CCAA	85	Adudicacion 2005 dec	Acciona-Brues y Fernández CC y Arascon	Pendiente el contrato	85 M€, Peaje en Sombra
Alto de las pedrizas	Carreteras	Andalucía (Malaga)	Estado	421	2005 (l)	Sin determinar	Pendiente el contrato	limite licitación - 421 M€
Ferrocarril Costa del Sol	Transporte	Andalucía CCAA		2337		Sin determinar		2337 M€
Málaga-Estepona	Carreteras	Andalucía	Estado	481	1996	autopista del sol - Ausol	En servicio	Valor de construcción - 481 M€, Peaje
Metro Sevilla	Transporte	Andalucía CCAA		428,5	2004	DRAGADOS, SACYR, RUSVEL, GEA 21, CAF y TUZSA	En construcción	428, 5 M€

Metro Malaga line 1 & 2	Transporte	Andalucía CCAA		403	2004	UTE - FCC, Comsa, Sando, AZVI, Construcciones Vera y Caja Rural Intermediterránea	En construcción	403 M€
Granada Metro	Transporte	Andalucía	CCAA	280	2005 (l)	Sin determinar	Pendiente el contrato	280 M€
Estepona Guadiaro	Carreteras	Andalucía	Estado	180	1999	autopista del sol - Ausol	En servicio	Valor de construcción - 180 M€, Peaje
Metro Malaga line 3	Transporte	Andalucía CCAA		178		Sin determinar	Pendiente el contrato	178 M€
Train Chiclana - San Fernando	Transporte	Andalucía	CCAA	116,4	2003 (a)	Sin determinar	Pendiente el contrato	116.4 M€ (con extensión Cádiz)
Tramo Vélez - Torre del Mar	Transporte	Andalucía CCAA		18,8	2003 (a)	Alsina Graells, Sando Construcciones y Continental Rail	En construcción	18.8 M€
Sevilla - Cádiz	Carreteras	Andalucía	Estado		Anterior a 1975 (c)	Aumar	En servicio	94 km, Peaje (BOT)

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