MACHIAVELLIAN PPP?

EVIDENCE FROM ITALIAN LOCAL GOVERNMENT'S PROJECTS FOR PUBLIC SERVICES

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ABSTRACT

Public Private Partnerships (PPPs) have been widely advocated as flexible contractual solutions enabling the public sector to profit from private firms' innovative solutions for providing public services. More recently, however, practitioners and academics alike have cast doubts on a possible instrumental use of PPPs. When most of the upfront investment rests on the private partner, the public counterpart may be tempted by reaping the benefit in the short-term while shifting to farther years the financial burden.

If the budget accounts, especially at the Municipality level, is tight enough, such a "Machiavelian" use of PPPs may become the privileged way to realize infrastructural facilities without any consideration of the efficiency of the provision. We test this "public finance bias" hypothesis by using data from local projects by Italian Municipalities.

INTRODUCTION

Recent years have been characterized by a growing involvement of the private sector in complex projects traditionally masterminded by the public sector. Even if a number of different joint events could be pointed out as an explanation of current trend, we identify two main reasons for the observed trend: the need for infrastructures renewal and the limited availability of public funds, due mainly to a tighter fiscal discipline. We focus our investigation on the Local Governments, that represent the sole (political and economical) decision maker for the choice to provide municipalities with new infrastructures, and the main player in the related procurement processes.

It is a widely held view that adequate, effective and universally accessible infrastructural equipment and public services are prerequisites for economic development and constitute the main stimulus for the territorial convergence. Infrastructure equipment, in fact, is one of the key indicators of any country's competitiveness[1] – the disposal and efficient management of infrastructures is a suitable signal for skilled, reliable and economic issues sensitive local governments – other than source of new private investments.

Italy suffers from large infrastructure gap with respect to other European countries[2], thus massive investments in those key economic sectors have become of paramount importance. As the traditional procedures for awarding public contracts of works require previous allocation of funds on the public buyer side, and given that widespread difficulty in finding them both by internal (local governments' budget) and external (European Structural Funds)[3] sources, finding some contractual agreements able to dispose of the experience of the private sector as well as its financial capabilities seems more a need than an opportunity.

In years of transition from a centralized budget system to a decentralized one, the local governments need to manage their growing budgetary discretion taking into account the European

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[1] As reported in Appendix II of IMD World Competitiveness Yearbook 2009: *«Competitiveness of nations is a field of economic knowledge, which analyzes the facts and policies that shape the ability of a nation to create and maintain an environment that sustains more value creation for its enterprises and more prosperity for its people. The methodology of the WCY divides national environments into four main factors: Economic Performance, Government Efficiency, Business Efficiency and Infrastructure»*.
[2] See, from the others, Antellini Russo and Iossa (2008).
[3] At the moment, the European Structural Funds are addressed to the new member States.

commitment for the national government as arranged by Maastricht Treaty[4]. Over the years, each of the European Union member states has implemented the Stability and Growth Pact at a national level, applying its own criteria and rules in agreement with national legislation concerning the accounting management relations between various levels of government. Therefore the Stability and Growth Pact has set limits in terms of planning, results and reorganization, inside which the member states can move independently. From 1999 to date, Italy has formulated its own National Stability Pact (NPS), each year stating the planning goals for territorial bodies and corresponding results in a variety of ways, mainly alternating different configurations of financial balances to fit expenditure before reverting to the same balances. The National Stability Pact stems from the need to bring the national economy and local governments accounts towards the fulfillment of the parameters of the Treaty. The net indebtedness of the public administration is the main parameter to be monitored for the purpose of complying with convergence criteria, and the reason for the formation of debt stock. The primary target of the fiscal policy which goes to form the National Stability Pact is the control of the national indebtedness of territorial bodies (local and regional authorities).

Public Private Partnerships (PPPs) – originally intended as methods of procuring public services and infrastructure by combining the key abilities of the public and private sectors with emphasis on Value for Money (VFM), efficient risk allocation and delivering high-quality public services – seem to be used as the perfect solution of abovementioned infrastructure gap and budget constraint issues. The PPP contracts, however, are typically complex and require an high level of professional skills by public officers; furthermore, since they commit local governments for long time (typically more than 20 years) they need to be accurately designed. Nevertheless, the need to plug the infrastructure gap and overtake budget deficit might lead local governments to by-pass previous considerations and any economic analysis that must go before the strategy design of complex

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[4] *«The Stability and Growth Pact provides for the gradual reduction of the ratio between deficit and gross national product and the reaching of a ratio between the latter and total indebtedness of not more than 60%. In order to achieve these objectives, Italy has committed to keep the level of primary surplus constant (net of interest charges) at 5%. The aim of the national program is to define the interventions on public finance and economic policy that must be adopted in order to reach this objective, taking into consideration that, if it is not reached, the sanctions provided in the Stability Pact could be imposed and could amount to fines equivalent to a half-point of GNP for defaulting countries»* (The State General Accounting Department web site: http://www.rgs.mef.gov.it/ENGLISH-VE/index.asp).

projects procurement. The lack of experience on the public officer side and the urgency of infrastructure investments stimulate, in fact, the employ of PPP contracts, even if they may not be justifiable from the standpoint of the efficient provision. Thus, at the end of the story, the PPP option could generate significant pressure on public balances, instead of attenuate it, by hiding larger costs due to shifting them over the time causing important intergenerational issues.

The aim of this paper is to investigate empirically an issue relatively less explored both on literature and on practitioner side: the relationship between Public Private Partnerships and public account. In particular, we try to offer an answer to the question of the existence of a causality link from budget deficit to utilization of PPPs. The main difficulty we faced at the beginning of our analysis was the absence of unified data. So, our first step was to combine information from different sources in order to construct an original dataset containing the tender notices relative to all the PPP procedures from the Local Governments, the descriptive statistics of all the Italian Municipalities and the balances of the latters (with a special attention devoted to identify and calculate the stability indices used by the State General Accounting Department to evaluate the structural condition of the municipality finances). After checking the internal coherence of all the data, we proceeded with the empirical analysis. Firstly we simply considered the existence of correlations across variables regarding the tender notices and others regarding the balance accounts, using OLS instead of charts; secondly, we tried to investigate if budget deficit somehow contribute to explain the tenders for PPP contracts, using more structured econometric models (as probit and logit). The results demonstrate our initial intuition: the link exists.

The paper proceeds as follows. In the conceptual background, after presenting the problem of the infrastructural gap in Italy and the scarcity of self-financial resources, we propose the definition for Public Private Partnerships used for the rest of the paper. Then we provide a theoretical background, describing the key issues emerged in the professional literature on the topic. In the section labeled methods, we present the data and the summary statistics derived from the tender notices and from the public budgets of the Italian Municipalities. In the Analysis section we provide the models of estimation and the main results. The Final remarks conclude.

CONCEPTUAL BACKGROUND

Infrastructural gap of Italy and across Italian Regions

The work of Ashauer (1989) shows the key role of public infrastructures and public capital investments for the productive capacity of an area, both by increasing the attraction for new investments and by enhancing the operational efficiency of existing economic activities. Despite her critique to the robustness of the Ashauer's result, Munnel (1992) confirms that *«in addition to providing immediate economic stimulus, public infrastructure investment has a significant, positive effect on output and growth»*. From these seminal works, the research on the topic evolves, especially on the empirical level. A standpoint comes recently with Esfahani and Ramírez (2003): the impact of infrastructure investments on GDP growth is confirmed as substantial but the institutional framework and the response of the economic system to movements on the stability growth path become essentials. In particular, from the analysis emerges that *«the institutional capabilities that lend credibility and effectiveness to government policy play particularly important roles in the development process through infrastructure growth»*.

At a micro-level, the infrastructural equipment impacts on the daily activities of every firm operating in the served area. A ready-reference is provided by the diagram below (Fig. 1).
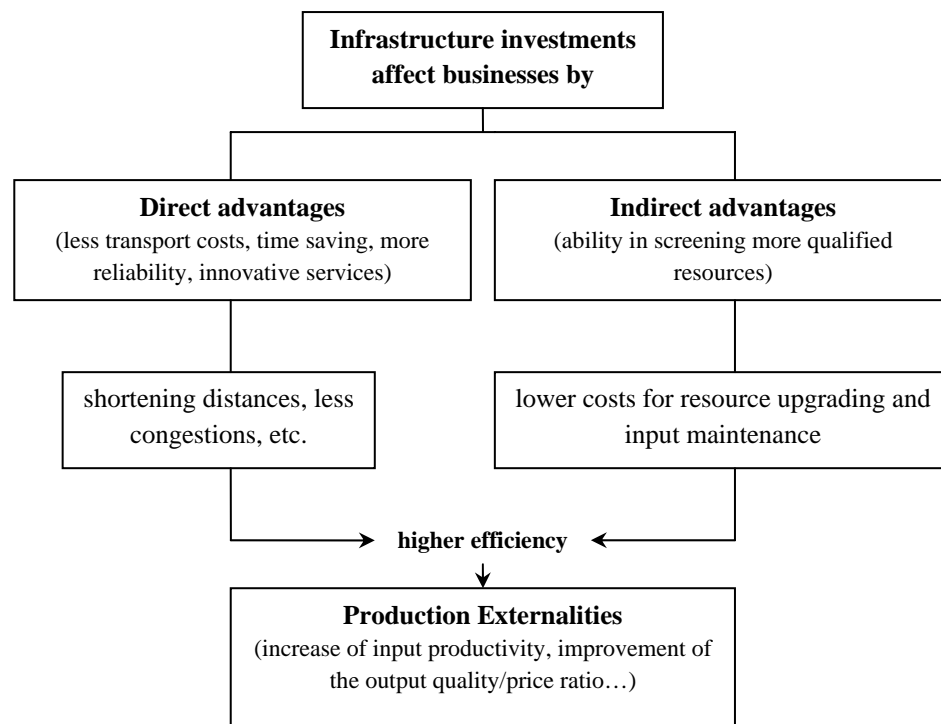

Fig. 1 – Internal and external externalities of an infrastructural facility on firm's activity

In 2008, the public expenditure in Italy accounted for the 49,3% of the GDP (where the mean for EU15 was of 46,7% of the GDP), which ranked the country at the third position below France (52,7%) and Belgium (49,9%). But, if we have a closer look inside the aggregate data, we find that the public expenditures for fixed investments (infrastructures, machineries, etc.) accounted only for the 2,2% of GDP (where the mean for EU15 was of 2,5%), that corresponded to the eleventh position. After an increasing for seven years (1997 – 2004) at an annual growth rate of 2,9%, the trend of the investments in public works become negative (-2,9% in 2005, -3,0% in 2006, -2,9% in 2007 and -5,1% in 2008), without any explanation in terms of limit of physical supply or satisfaction of structural demand of infrastructural facilities. Facing the other European countries, Italy suffers a consistent gap: the infrastructural equipment is scarce and obsolete. In the railway sector, for instance, in 2012 Italy will account for 876km of high speed rail lines versus the 2125km of France and the 3230km of Spain. One of the reasons of the infrastructural gap of the country, could be fund also in the absence of convergence inside the Italian Regions.

To evaluate the degree of infrastructural equipment across the Italian regions, we can divide the set of infrastructure in two indicators: the index of economic infrastructural equipment and the index of social infrastructural equipment. Given 100 the index for Italy, the former accounts for the equipment of a region with respect to road, motorways, highways, railways, airports, ports facilities, energy facilities, banking facilities, communication and postal facilities for inhabitant; the latter accounts for the equipment of a region with respect to cultural (i.e. theatres), receptive (i.e. gymnasiums), instruction (i.e. schools) and health facilities (i.e. hospitals) for inhabitant[5]. We dispose of the values of both the indices of two years: 2001 and 2007 (*Istituto Guglielmo Tagliacarne*, 2009). In the charts below, we show the different values of the index of economic infrastructural equipment (see Fig. 1) and of the index of social infrastructural equipment (see Fig. 2) of each region.

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[5] The indices are both evaluate with respect to the effective demand of infrastructural equipment, technological advance, availability of techniques for building and management the facilities and supply capability in each area.
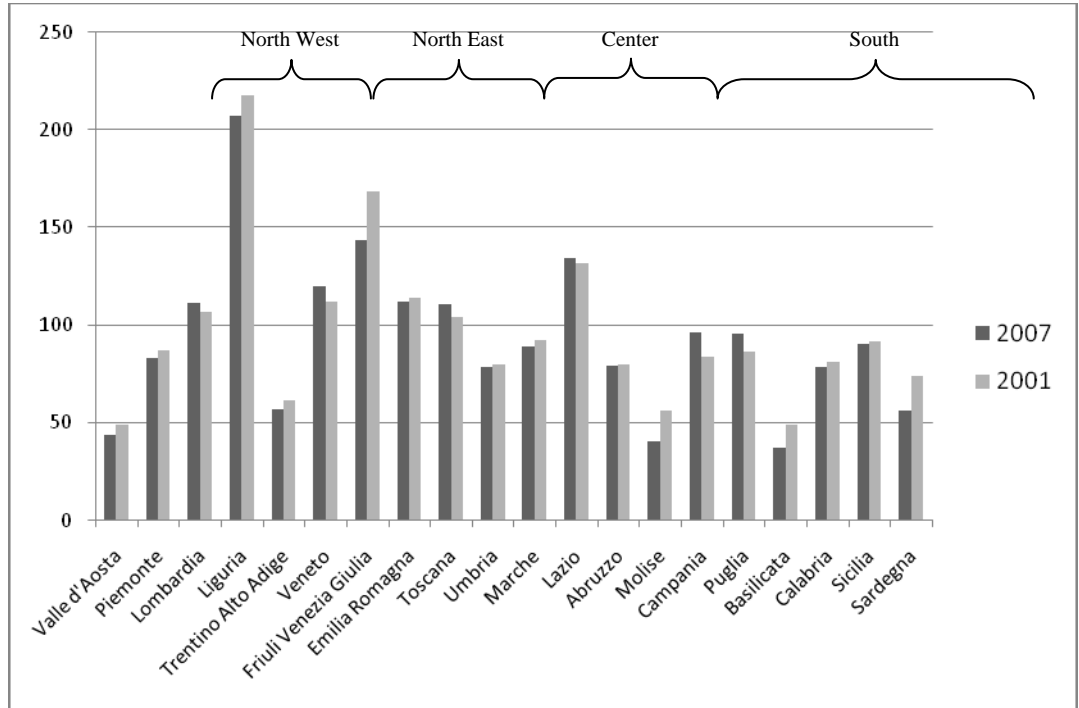
Fig. 2 – Index of economic infrastructural equipment (Italy = 100) in 2007 and in 2001. Source: our elaboration on data by the *Istituto Guglielmo Tagliacarne.*
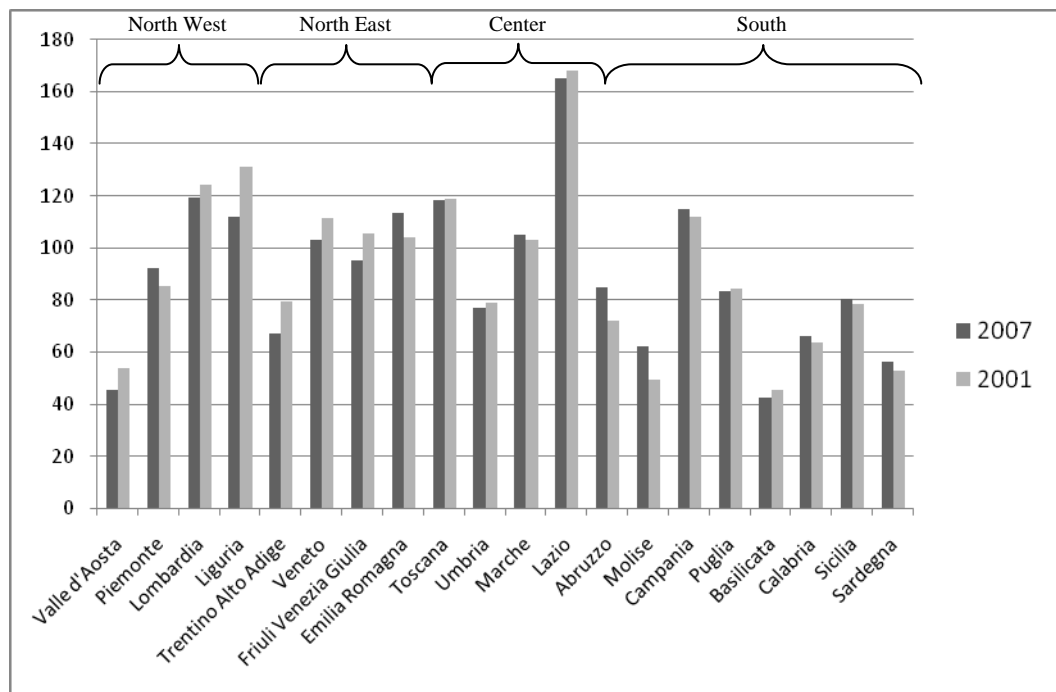
Fig. 3 - Index of social infrastructural equipment (Italy = 100) in 2007 and in 2001.
Source: our elaboration on data by the *Istituto Guglielmo Tagliacarne.*

Public budget concerns

To fill the gap, it is necessary to put into action a long-term
infrastructural plan and to devote massive financial resources for that
purpose. On the public account side, however, the policy adopted
from 2004 to 2006 was intended to cut expenditures. Before the
governmental reaction to the crisis in 2009, the local authorities
attended to the budget restriction requirements imposed by the
National Stability Pact cutting the capital expenditures instead of the
more political sensitive current expenditures. A Local Government
without a solid financial condition is also discouraged to recur at
financial markets: if the anticipation of capital could not be sustained
by certain revenues, the interests that must be paid for the loan
received increased the current expense at an unsustainable level.

Definition

Under the label of Public Private Partnership there are several kind of
different contractual agreements, varying in the degree of private
sector involvement. In a BTO (Build Transfer Operate) contracts, for
instance, the public authority select a concessionaire to construct an
infrastructure facility that immediately upon its completion becomes
property of the contracting authority. In a second moment, the
contracting authority decides to award the contract to operate the

facility to the concessionaire for a certain period of time. In a BOO (Build Own Operate) contracts, on the other extreme, the concessionaire owns the facility permanently. Thus, in the BOOs there is a full outsourcing but still not a true privatization: the concessionaire, in fact, could be forced to guarantee a predetermined flow of public services at capped price, eventually in exchange of certain fees by public authority. In the more common kind of PPP contract, the DBMFO (Design Build Maintain Finance Operate) contracts, finally, there is a complete bundle of all the aspects of a project: since the public partner – the final owner of the infrastructure at the end of the contract – only defines the objectives to be attained, the quality standard, the monitoring process and eventually the pricing policy; the private partner – the concessionaire – has the opportunity, during the contract period, to maximize its profits realizing and operating the infrastructure (in order to guarantee the required flow of services) under the given constraints.

Different institutional framework determines different degrees of discretion in contracting. In the Anglo-Saxon experience, the private partner participates at all the different stages of the project (design, build, operate and finance) and the public partner only defines the general framework: the agreement are characterized by a low degree of regulation by law and an high degree of discretion between partners. In the European Union, on the other side, scholars and European Commission declined some the basic characteristics of a PPP [6] and distinguish between institutional PPPs (when the cooperation between public and private sector operates in a ad hoc entity) and contractual PPPs (when there are only contractual links between the parties), as emerged in Bult-Spiering and Dewulf (2007). In the Italian experience the institutionalized PPPs are used mainly for complex projects, so the contractual PPPs are the rule. From 1994, the legislation allows for selection of proposals (tender intended to select a project design), project financing (where the main focus is on the private financing of the project) and concession for building and operating a facility (a form of bundling in which the concessionaire submits a bid on a previous defined design for the building, maintenance and operational phases). Only in 2006, the procurement legislation allow to bundle the design phase with the building and operating ones (Mori, 2010). Before 2008, however, the Italian form

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[6] See the Green Paper on PPP: COM(2004)327. *«The term public-private partnership ("PPP") is not defined at Community level. In general, the term refers to forms of cooperation between public authorities and the world of business which aim to ensure the funding, construction, renovation, management or maintenance of an infrastructure or the provision of a service»*
(http://ec.europa.eu/internal_market/publicprocurement/ppp_en.htm).

of DBO (Design Build Operate) contracts were structured in two stages: in the first one, the public authority chose the design; in the second one, the public authority awarded the contract after a competitive bidding on the winning design. The winner of the first stage was allowed to offer the same economic condition of the winner of the second stage and to get the contract as a result. Now, given the proved inefficiency of the previous procedure (Antellini Russo and Iossa, 2008), a one stage procedure is encouraged. On the revenue side, must be say that public sector could pay the contractor in the building phase, in the operating phase (especially if the infrastructure facility is mainly utilized by the public partner or is comprised in a public responsibility sphere, as an health care services), or could guarantee fees to the contractor during the period of the contract in order to sustain a price discrimination policy on the flow of services. Summarizing, the PPP contracts share the following characteristics: long duration, bundling of different phases, risk sharing, finance component, functional specifications for the final output and life cycle approach. The traditional procurement contracts, on the other side, normally are characterized by: short duration, single object, traditional risk pattern and final output based on technical specifications (Van Garsse, 2008).

We define Public Private Partnership every contractual agreement in which there is at least the bundle of construction phase and operate phase, despite if the public sector finance or not the former and part of the latter and despite of the final users of the flows of services generated by the infrastructure. According to the previous definition, we analyze together public contracts - under which the public authority pays the private contractor for building the infrastructure and for the flow of services guaranteed to its operational needs -, concessions - under which the private contractor has the disposal of the infrastructure and offers services to users - (Van Garsee, 2008) and project finance, under which private contractor finances the construction of the infrastructure and is repaid by the fees of the users (public or private), eventually with the contributions of the public authority[7].

Theoretical Background and Related Literature

The international theoretical literature on Public Private Partnership should be divided into four main currents, mainly interested on the

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[7] We follow the same line of the European Investment Bank: *«There is no simple, single, agreed definition of the term PPP. So … a PPP was defined to be the private-sector construction and operation of infrastructure (including Concessions) which would otherwise have been provided by the public sector»* (EIB, 2005). Reference: http://www.eib.europa.eu/attachments/ev/ev_ppp_en.pdf

following issues: i) the nature of contractual agreement, with a particular concern on how decide to choose a PPP contract instead than a traditional public procurement procedure; ii) the efficiency condition of a PPP contract, with a special focus on efficient risk allocation; iii) the technical aspect of a PPP contract, with considerations on bankability and the discount rate that should be used in the PPP test; and, residually, iv) the opportunistic reasons of PPPs.

The substantial differences between traditional public provision and PPP concern to two kinds of organizational structure: (i) ownership rights allocation; (ii) bundling or unbundling the tasks which form the final provision. In a conventional model of provision a government signs two contracts with two different agents: one with the builder of the facility, the other one with the operator, who maintains the asset and provides the service (unbundling). By contrast in a public-private partnership, there is only one firm which operates both activities (bundling).

Choosing the organization of the different tasks, the decision maker has consider the effects that the technological innovation (cost structure) has on the quality level of the service provided. If we analyse only the contracts in which the quality is verifiable and where a payment by government to the contractor is provided, we can observe that, in the case of positive externality, the best form of contract design is the bundling of building and operating phases. Conversely, in case of negative externality, the best choice is to keep separate the two phases. Considering an interaction between the two incentive schemes given to the firms, in case of negative externality, the unbundling dominates the bundling; in case of positive externality, with the bundling the social gain at equilibrium is greater, since the interaction between the two phases makes the unique contractors able to internalize the effort in enhancing quality to reduce costs. Now, suppose the quality is not verifiable (we faced an incomplete contract setup). When the government owns the asset (as in Italian framework) and there are two different winners for the two different phases, the builder has not enough incentives to improve the quality of the infrastructure (because she does not own the facility) and also she cannot internalize eventual positive effects derived from higher investment on innovative materials (because she does not manage the facility). So the government trusts only in the effort performed by the maintaining operator. By contrast, if the two phases are performed by only one contractor, under government ownership and if there is a negative externality in enhancing quality, the bundle of the building and the operational phases (a firm which carries out both tasks) will not generate any effort in building a more efficient

asset, so we have the same form for social welfare we had for the unbundling (Martimort and Pouyet, 2006).

In a PPP contract, the private partner usually faces different risks linked with demand variability, the intrinsic nature of the project and the political environment. The main source of uncertainty is represented by demand uncertainty. There are several type of optimal contract, differing through the kind of payment to private partner: no user fees contract and user fees ones. In particular, in an user fees contract, the decision maker has to choose a design able to balance demand risk borne by private firm, user fees distortion and opportunity cost of public fund. Regardless which type of optimal contract is enforced, looking at the intertemporal risk profile of cash flow, PPP is very close to conventional provision. Indeed, *«for low and high demand projects, an optimal PPP contract replicates the net cash flow streams of conventional provision, state by state»* (Engel, Fischer and Galetovic, 2008b).

According to a popular view, outsourcing could be the only solution for the problem of the provision of a service when there is a budget deficit. But, as Engel and al. (2008b) proved, the expected present value of the revenue from a project under conventional provision is exactly equal to the one from the same project carried out from a private firm, given firm breaks even. Thus, a more suitable justification for the choice of PPP is the case of government severe credit constraints. Under this hypothesis, the government does not have to decide between conventional provision or private provision, but it should choose between private provision or do not providing the service.

If interest groups can tempt the government to enforce contracts with low social benefit, the accounting costs differs from true costs. The optimal accounting rule can create two kinds of constraints on spending system: it can be tight, so projects with uncertain costs and low-cost projects are carried out; while it can be lax, so every projects are undertaken, except high-cost design ones. According to Maskin and Tirole (2007), if the private partner is cashless, then the optimal accounting rule (in the sense of social optimum) is a linear rule, with an upper constraint. Thus, PPP is better than conventional provision, because it allows to evaluate before project's true cost, making hard the public official manipulation and reducing adverse selection effect.

The Italian literature on the topic converges on the hypothesis that the financial condition of a Local Government is the main reason to choose a complex contract as a PPP (Vecchi, 2009: Mori, 2010). However, all the analysis conducted are unable to present any empirical result.

METHODS

Data and summary statistics

Our analysis is based on a unique set of information related to tender notices and local governments' accounts derived from three different datasets conveniently arranged. In the first subset (tender notices) we exploit available data of tender public notices as enclosed in *Project Financing Quarterly Reports* for the period 2003-2008, and collected by the Italian national observatory on Public-Private Partnerships[8]. In the second one (local governments' accounts), we combine information concerning local governments' characteristics (budgetary income and spending, deficit and surplus, financial exposure, population, areas, etc.), for the period 2003-2007, coming from official budgetary data of the State General Accounting Department of the Italian Ministry of Economy and Finance and the Directorate for Local Finance of the Italian Ministry of Interior.

The former is useful to investigate the dynamic of public-private partnerships projects and their development within the class of heterogeneous Italian local governments (according to their geographical extent and location, population size, etc.). We take into account the several sectors/categories (energy, water, transportation, tax-collection services, etc.) the tender public notices are referred to, the nature of estimated transactions (if they are incomes or costs, on the municipality side) and, more interestingly, the ex-ante estimated values for projects which may also differ from the ex-post awarded prices or fees. Overall, we analyze a sample of 7.740 public notices issued by 2.355 different municipalities, where the total value of these projects amounts roughly to 30 billion €

As a first evidence, the time distribution of public notices is not uniform as a consequence of a number of shocks, such as changes in regulation. The 2004 Eurostat Decision[9], for example, may explain the strong cut down of project financing announcements in the period 2007-2008 – when the decision has been acknowledged in the national regulation system[10] – with respect to previous years (see Tab. 1). According to this Decision, the PPPs projects must not always be classified like assets in local governments' budgets depending on the

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[8] See the *Project Financing Quarterly* series edited by Cresme Ricerche S.p.A. on data of *Osservatorio Nazionale del Partenariato Pubblico Privato* in coordination with *Unità Tecnica Finanza di Progetto* – CIPE, Presidenza del Consiglio dei Ministri, the Italian Ministry of Economy and Finance –, Unioncamere and the Chamber of Commerce of Rome.

[9] The Eurostat Decision of the 11th February 2004, *"Treatment of public-private partnerships"*, on the classification of PPPs with respect to public budget and in compliance with the European System of Accounts (ESA 95).

[10] See the comma 1-bis D.L. n. 248/2007 converted into L. n. 31/2008.

fulfilment of two particular "risk-allocation" conditions; especially, the PPPs contracts can be entered out of the public balance (*off balance*), if the private partner takes charge of the *construction risk* and at least one of the two consequent risks – the *availability risk* and the *risk on demand*. In particular, the Eurostat Decision modifies the accountant treatment regulation of PPP contracts drawn up by local administrations by classifying the different PPP projects as *on/off-balance* ones on the basis of the risk allocation scheme[11]. Assuming to group all projects in some main categories, without loss of generality, we cluster them in "*concessions* group" and "*project financing* group", other than *various* for remaining part. The latter consists exactly of financing public work procedures for which the probability that risk-allocation conditions are not satisfied is higher. As a consequence, it would be hardly surprising that project financing procedures were (ab)used – thanks to the easier off-balance classification – before the 2004 Eurostat Decision came into effect. On one hand we find, in fact, that projects financing notices decrease from 63% in 2003 to 35% and 19%, respectively in 2007 and 2008, although this drift is partially justified by more and more complex procedures whose fulfilment is required to local administrators; on the other hand, the concessions notices increase from 12% in 2003 to 59% and 74%, respectively in 2007 and 2008.

It is worth noticing, in fact, that the on/off-balance arrangement may have very crucial consequences for the public deficit. In general, if the asset is classified on-balance in the public budget, the construction start-up costs, according to capital expenditure scheme, requires being entered in the public budget as investment by negatively affecting the local governments' deficit/surplus; as a result of this expenditure, the public debt will increase. By conversely, if the asset were classified off-balance, the respective capital expenditures sustained by the private partner would not concern either deficit or public debt. This is why the local governments could have reduced the number of project financing procedures (the off-

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[11] The *construction risk* is usually referred to those events such as delay on delivery, low quality performance of project standard, costs renegotiation and technical hitches during project execution, failed completion of the works, etc.. The *availability risk* is, instead, related to the dealer's ability to supply the agreed contractual services, both in terms of volume and quality standard. An actual risk transfer requires that public payment be related to the real availability degree concerning the private partner, the volume and predetermined quality standard, according to the "take and pay" principle. The *risk on demand* depends on the variability of customers' needs for services while does not depend on the quality performance of the dealer. This unpredictability may be caused, instead, by some other factors, such the users' preferences for "better value for money" alternatives, the business cycle, the new market trends, etc..

balance ones) after the Eurostat Decision has made the budgetary treatment of public-private partnerships more rigorous.

Year 2003				Year 2004				Year 2005			
Procedures	Freq.	Percent	Cum.	Procedures	Freq.	Percent	Cum.	Procedures	Freq.	Percent	Cum.
Various	276	25,30	25,30	Various	430	29,92	29,92	Various	672	44,59	44,59
Concessions	126	11,55	36,85	Concessions	262	18,23	48,16	Concessions	149	9,89	54,48
PFs	689	63,15	100,00	PFs	745	51,84	100,00	PFs	686	45,52	100,00
Total	1.091	100,00		Total	1.437	100,00		Total	1.507	100,00	
Year 2006				Year 2007				Year 2008			
Procedures	Freq.	Percent	Cum.	Procedures	Freq.	Percent	Cum.	Procedures	Freq.	Percent	Cum.
Various	298	26,23	26,23	Various	76	6,20	6,20	Various	90	6,70	6,70
Concessions	307	27,02	53,26	Concessions	726	59,27	65,47	Concessions	992	73,81	80,51
PFs	531	46,74	100,00	PFs	423	34,53	100,00	PFs	262	19,49	100,00
Total	1.136	100,00		Total	1.225	100,00		Total	1.344	100,00	

Tab. 1 – Year by year grouping of Public-Private Partnerships – Concessions and Project Financings – (2003-2008).

Another aspect worth highlighting is the trend of the total values of these contracts during the examined period. Assuming that the information on contract value is not available for a part of the public notices in the sample, depending on the predictability of the project value at the time of notice publication, the investigation concerning the values of only 5.579 out of 7.740 tenders confirms previous considerations in a different manner. On the whole, there is a preponderance of project financing notices both in value (on average €7.117.161) and frequency (2.870 notices, the 51,44% of the entire sample), suggesting how local administrators prefer the project financing instrument in funding public works and the management of complex services, as correlated with the accountant advantages of the off-balance treatment for these procedures (see Tab. 2).

Period 2003-2008				
Procedures	Mean	Std. Dev.	Freq.	Percent
Various	€2215054,9	12771354	817	14,64
Concessions	€4084444,3	20699560	1892	33,91
PFs	€7117160,6	25726040	2870	51,44
Total	€5370804,7	22651994	5579	100,00

Tab. 2 – Public-Private Partnerships total values distribution, overall the sample.

Furthermore, a more in-depth analysis shows an unexpected time development for the involved procedures: as before, the share of project financing procedures is progressively (and constantly) decreasing in time – they were the 69% of the total sample in 2003, but the 41% and 24%, respectively, in 2007 and 2008 –, followed by the complementary increase of concessions (up to the 56% and 74%, respectively, in 2007 and 2008). What is surprising, the respective mean values show a very interesting fluctuation; the average contract values are, in fact, always larger in case of project financing procedures during the first period (when the Eurostat Decision is not yet in force), although the year frequencies of these contracts are greater than the concessions ones, suggesting specific unit and total contract amounts much higher (see Tab. 3). Surprisingly, the less project financing procedures become – with respect their occurrences –, the more values they explain above all in the second period (when the Eurostat Decision comes into effect). This evidence brings to light how an abuse of project financing methods could really have taken place in past years; therefore, the new stricter regulation might have required that local administrators were more conscientious in selecting the correct procedures for providing public works and services by cutting down the "unnecessary" off-balance low-value contracts and limiting themselves to choosing the "necessary" (proper) off-balance path only in case of high-value contracts for which all risk allocation conditions had been satisfied. The year by year regular growth of the project financing's worth is well shown by the increasing trend of average values (see Tab. 3), so that also the total amount of these contracts exceeds the concessions ones in 2007 and 2008 jointly (€4.647.114.840 vs. €4.005.992.701).

	Year 2003					Year 2004					Year 2005			
Procedures	Mean €	Std. Dev.	Freq.	Percent	Procedures	Mean €	Std. Dev.	Freq.	Percent	Procedures	Mean €	Std. Dev.	Freq.	Percent
Various	1509718,9	3056193,9	137	17,68	Various	2097927,2	9276897,5	162	17,70	Various	1426012,7	11096747	338	32,47
Concessions	5514573,0	12497499	103	13,29	Concessions	4634594,8	9363014,2	136	14,86	Concessions	4818512,4	10000508	113	10,85
PFs	8482891,7	28824037	535	69,03	PFs	4679964,2	7440139,2	617	67,43	PFs	8630847,1	35029015	590	56,68
Total	6855715,6	24547039	775	100,00	Total	4216073,2	8147519,7	915	100,00	Total	5877698,4	27503803	1041	100,00

	Year 2006					Year 2007					Year 2008			
Procedures	Mean €	Std. Dev.	Freq.	Percent	Procedures	Mean €	Std. Dev.	Freq.	Percent	Procedures	Mean €	Std. Dev.	Freq.	Percent
Various	4280746	22118739	141	16,59	Various	3457563,4	14171953	22	2,28	Various	5962367,7	12762002	17	1,65
Concessions	8679729	54022126	228	26,82	Concessions	3780153,3	10024272	546	56,46	Concessions	2535285,9	7839682,5	766	74,30
PFs	6779733	30079361	481	56,59	PFs	6671949,9	16301238	399	41,26	PFs	8004059,8	24799876	248	24,05
Total	6874841	37074282	850	100,00	Total	4966016,7	13137368	967	100,00	Total	3907270,7	14183700	1031	100,00

Tab. 3 – Year by year Public-Private Partnerships worth's distribution (2003-2008).

The category distribution of services and public works provided by local governments needs to be considered as well, both in

occurrences and in worth. Our sample covers a number of services and public works we get into 18 main groups according to the object of activity:

- Water, gas, energy and telecommunication;
- Tourist landing places;
- Street furniture and green belt;
- Cultural Heritages;
- All-purpose centers;
- Cemeteries;
- Commerce and craftsmanship;
- Office districts;
- Environmental health;
- Sporting plants;
- Car parks;
- Redevelopment areas;
- Public health;
- Education and welfare;
- Leisure time;
- Transport network;
- Tourist trade;
- Various.

Among these activities, the most important ones – as shown by the frequency of tenders, often more than 10% – are surely: water-gas-energy-telecommunication, street furniture and green belt, sporting plants, car parks and cemeteries (see Tab. A1). The data suggests a certain constancy in the shares of projects related to these activities over the examined period. Intuitively, the higher number of occurrences for tenders related to these sectors might be explained as a consequence of the less complexity of procedures and project designing, as well as the more ease in defining needs and minimum quality standards on the local governments' side.

In support of previous conjecture, the analysis of the data on contract values (average and total amounts) might provide us with a helpful counter-factual tool. The most valued contracts are, in fact, those (on average, contracts amounting to more than €10 million) belonging to sectors whose projects turn out to be very complex both in procedures and in defining local governments' needs and quality standards. In particular, tourist landing places, office districts, car parks, redevelopment areas and, above all, transport networks projects – the latter showing average contract values much more than €100 million – satisfy these requirements. Thus, it is no accident that the same fields explain the lower number of tenders, overall the sample, the only exception being the car parks projects.

ANALYSIS

Regression analysis

In this section we use our unique dataset to explore the main factors explaining the local governments' behaviour in choosing the public-private partnership contracts in financing their public works or services. We proceed in two steps: first of all we analyse the correlations among a number of variables describing structural features (such as demography, financial indexes and local medium-term planning concerning etc…) of local governments with respect to the values of public-private partnership tender notices. Then, we proceed to test 6 binary models whether financial exposure of municipalities and the nature of demand for public services affect the likelihood to resort to PPP contracts rather than traditional procurement contracts (see Definition paragraph). To this end a number of logit and probit models have been estimated.

The list of explanatory variables included, overall, in our regressions may be organized in different clusters according to the following scheme:

- Planning variables ($X^{Planning}$): these are binary variables that specify the existence of such a commitment in taking investment decision on the local government side.

- Demographic variables ($X^{Demography}$): these are variables that take into account the dimension of municipalities both in population size (number of inhabitants) and extent of areas (city surface, road-network, etc.). These explanatory variables are conveniently used as proxy of service demand.

- Budgetary indexes (X^{Budget}): these ones stem from the results of local governments' public budgets. The budgetary data have been suitably manipulated in order to yield some meaningful financial indexes able to correctly show the deficit (or surplus) and public debt situation of local administrations.

In particular, the reduced form approach allows us to focus first of all on the directions rather than the magnitude of effects. The following standard OLS model has been estimated:

$$CV = \alpha_0 + \alpha_1 X^{Planning} + \alpha_2 X^{Demography} + \alpha_3 X^{Budget} + \varepsilon_i$$

where each X is the vector of explanatory variables belonging to the above mentioned clusters. A cross sectional estimate is carried out on roughly 2500 observations, where each observation is related to public notices and the contract value (CV) is the dependent variable.

The signs of correlations seem to confirm our conjectures: the number of inhabitants (v01_11) are positively correlated with contract values, so that higher populated municipalities show higher contract value than lower populated municipalities, and this effect is stronger if the municipalities are located in South and Centre of Italy (economic less developed areas), rather than the North (economic more developed areas) - SU and CE variables, respectively, in the Tab. 4.

The Local Government Multi-Year Operational Plan (v01_141) explains only partially the contract value even if this relation is negative; this finding is compliant with the commitment to local administrators in extending the PPP contract values when an operational plan exists. In fact, the local government multi-year operational Plan (*Piano Pluriennale di Attuazione*) is at least a three years planning documents that i) identifies the public works and the infrastructures to be realized, ii) provides a plan of provisional expenditures, iii) indicates the processes and the financial sources to be used. Although the local government could specify some aspects of the Plan every year, the general aspects must be kept unmodified over time.

The Local Government Energetic and Environmental Plan (v01_221) – *Piano Energetico ed Ambientale Comunale* – is an instrument for: i) mapping energetically supply and demand in the municipality and the environmental impact of all the public administration activities, ii) defining energetically and environmental issues, iii) planning annual or multi-years activities to be developed (with special focuses on the procedures to be adopted and the financial resources to be devoted). The Plan is a form of strong commitment for the local governments, so that a positive correlation with the contract value is justified.

The Local Government Town Plan (v01_121) – *Piano Regolatore* – is a plan according to which local government defines the urbanization drivers for the municipality. It is not compulsory for little and medium sized Municipality but, when adopted, represents a rigid commitment for local governments. A negative correlation goes in the same direction of multi-year operational Plan, so that the commitment to local administrators affects local administrators in extending the PPP contract values.

Finally, budgetary drivers are the most meaningful in explaining contract values: deficit/surplus (Avz_Dsv_raw) are obviously positively correlated with our dependent variable, suggesting how

more efficient local administrators – the ones which experiment higher budget surplus or lower budget deficit – are usual to arrange higher-valued PPP contracts. This finding is also consistent with the debt index (indx7cc), which takes into account the degree of local government debt: more the public debt is, higher the value of PPP contracts is.

	OLS I.	OLS II.	OLS III.
v01_121	-	-1230899 (-1.36)	-
v01_221	7238493*** (4.77)	-	6541506*** (4.36)
v01_141	-1900565* (-1.73)	-1156914 (-1.06)	-1517541 (-1.40)
v01_11	11.064220*** (9.08)	11,50266*** (10.07)	10.22372*** (8.84)
Avz_Dsv_raw	0.326152*** (2.69)	0,0242249** (2.04)	0.0354662*** (2.92)
indx7cc	2.63e+07*** (2.84)	4400232** (2.30)	4149230** (2.18)
indx7	-3.81e+07 *** (-2.60)	-	-
CE	2106805 (1.63)	-	-
SU	2552813** (2.30)	-	-
_cons	2747837*** (3.32)	4133761*** (5.10)	3034663*** (4.58)
Obs.	2538	2541	2538
F-test	18.85	24.48	28.06
Adj. R^2	.0533	0.0461	0.0506
Root MSE	2.2e+07	0.0442	2.2e+07
t- statistic shown in parenthesis: significant levels at *0,10, **0,05, ***0,01.			

Tab. 4 – OLS regression analysis on Contract Value.

In the second step of our analysis, we investigate those factors affecting the probability that a local administrator chooses a contract in the PPP format (pnotices is our binary dependent/response variable that takes 0 values if no PPP contract is chosen by local administrator, and 1 if he has used at least one PPP contract), rather than a traditional procurement one. By exploiting the binary model approach (logit and probit) we analyze if local administrators behave strategically on the basis of planning commitments, demographic features and budgetary indexes. The binary models we estimate is as follows:

$$\Pr(y = 1 \mid x) = \beta_0 + \beta_1 X^{Planning} + \beta_2 X^{Demography} + \beta_3 X^{Budget} + \varepsilon_i.$$

The main results, both for logit and probit models, confirm our intuition (see Tab. 5): local government budgetary indexes – such as public debt, spending and income indexes – strongly affect the probability of preferring PPP over traditional procurement procedures. The amount of public debt, population size, geographical area of municipalities and the commitment to some form of planning, rather than any considerations on more efficient provisions, make local administration more likely to prefer PPP contracts. In particular, the larger local public debt (indx7cc) the higher the probability that local municipalities will use a PPP procedures. The financial self-sustainability index (indx11cc) also is consistent with the idea that higher income (tax and other) is positively correlated with the chance of adopting more complex contracts, such as PPPs. Furthermore, the structural index or, which is the same, the ratio of structural costs and total income (indx6bis), seems to positively affect this probability.

	LOGIT I	LOGIT II	LOGIT III	PROBIT IV	PROBIT V	PROBIT VI
pop_class	1.388021*** (61.94)	.388382 *** (61.98)	1.387265*** (61.88)	.7671655 *** (66.43)	.767371*** (66.47)	.7667387** * (66.36)
v01_121	-.0553225 (-1.17)	-.0587477 (-1.24)	-.0590956 (-1.25)	-.0177108 (-.71)	-.0190788 (-.76)	-.0189971 (-.76)
v01_141	-.0207153 (-0.33)	-.0193652 (-.31)	-.0204151 (-.33)	-.0084149 (-.25)	-.0077928 (-.23)	-.0086693 (-.25)
v01_151	.1990165 *** (4.06)	.1998929** * (4.08)	.199905*** (4.08)	.099887*** (3.81)	.1003649** * (-.23)	.100232*** (3.82)
v01_221	.2273257 ** (2.18)	.2371771** (2.29)	.2370044 ** (2.28)	.158484*** (2.81)	.1616364** * (2.87)	.1615205** * (2.87)
v01_61	9.46e-07 ** (2.08)	9.65e-07** (2.13)	9.62e-07** (2.13)	5.61e-07** (2.28)	5.68e-07** (2.31)	5.66e-07** (2.30)
indx1cc	.0026409 (0.00)	-.0619197 (-.33)	-.0597011 (-.32)	-.0759804 (-.20)	-.0111892 (-.12)	-.0103349 (-.11)
indx3	.0914046 (.45)	.0772078 (0.38)	.1058395 (.52)	.0398991 (0.38)	.0372749 (.36)	.0579186 (.56)
indx7cc	.5306751 *** (5.53)	.5159782** * (5.39)	.5308624 *** (5.59)	.2854608** * (5.45)	.2810101** * (5.38)	.2914541** * (5.63)
indx8cc	2.123822 (1.16)	2.027821 (1.10)	2.059285 (1.12)	1.062573 (.98)	1.03372 (.95)	1.053741 (.97)
indx11cc	.7765164 *** (6.28)	.7151883** * (6.13)	.7424509** * (6.25)	.3945424** * (6.15)	.3713155** * (6.16)	.3887934 *** (6.33)
indx6biscc	.0973953 (.82)	.1814157* (1.76)	-	.0930188 (1.53)	.1250234** * (2.37)	-

indx1bis	-.0570214 (-.06)	-	-	.0922386 (.20)	-3.005997*** (-41.42)	-
indx6	.6081677 (1.50)	-	-	.2213903 (1.08)	-	-
indx6bis	-	-	.2639211** (2.10)	-	-	.1742127*** (2.70)
_cons	-5.637158*** (-28.92)	-5.442118*** (-37.63)	-5.478753*** (-36.95)	-3.075721*** (-31.49)	-	-3.028469*** (-40.59)
Obs.	24689	24689	24689	24689	24689	24689
LR chi2(14)	7616.20	7613.94	7615.20	7606.74	7605.53	7607.14
Prob>Chi2	0.0000	0,0000	0.0000	0.0000	0.0000	0.0000
Pseudo R^2	0.3692	0,3691	0.3692	0.3688	0,3687	0,3688
z- statistic shown in parenthesis: significant levels at *0,10, **0,05, ***0,01.						

Tab. 5 – Logit and Probit regression analysis on probability to resort PPP contracts.

FINAL REMARKS

In this paper we explore the factors most affecting the probability that local municipalities resort to PPP procedures in providing public works and services rather than other traditional procurement procedures. The estimates suggest a strong relationship between the degree of public debt of local municipalities and the use of PPP contracts. This effect is strengthened by structural characteristics public budget (i.e. spending and income indexes). Furthermore, geographical aspects and demographical size of municipalities affect positively this relation.
Future research will explore the potential impact of political cycle on local municipalities strategic behaviour with respect to this issue.

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APPENDIX

	Year 2003					Year 2004			
Category	Mean	Std. Dev.	Freq.	Total amount	Category	Mean	Std. Dev.	Freq.	Total amount
Water, gas, energy and telecommunication	€3.189.395,3	4.651.391,5	86	€274.287.996	Water, gas, energy and telecommunication	€4.267.758,1	11.171.723,0	112	€477.988.907
Tourist landing places	€16.510.970,0	22.775.423,0	17	€280.686.490	Tourist landing places	€17.174.091,0	16.428.244,0	13	€223.263.183
Street furniture and green belt	€636.116,6	1.412.633,0	45	€28.625.245	Street furniture and green belt	€901.996,2	1.554.107,1	71	€64.041.731
Cultural Heritages	€546.667,7	1.127.124,0	7	€3.826.674	Cultural Heritages	€2.875.000,0	3.005.203,8	2	€5.750.000
All-purpose centers	€8.177.790,6	19.272.377,0	22	€179.911.393	All-purpose centers	€3.210.422,5	3.145.420,0	23	€73.839.718
Cemeteries	€2.666.488,5	5.068.255,7	80	€213.319.080	Cemeteries	€3.333.181,4	5.380.780,9	112	€373.316.317
Commerce and craftsmanship	€4.444.603,3	10.080.461,0	35	€155.561.116	Commerce and craftsmanship	€5.368.704,3	11.314.427,0	59	€316.753.554
Office districts	€13.130.899,0	9.535.261,7	7	€91.916.293	Office districts	€7.743.610,8	9.607.038,7	13	€100.666.940
Environmental health	€7.721.470,3	10.266.695,0	10	€77.214.703	Environmental health	€3.706.708,4	5.371.893,8	7	€25.946.959
Sporting plants	€3.822.428,5	6.524.826,3	142	€542.784.847	Sporting plants	€3.413.380,6	6.379.898,4	153	€522.247.232
Car parks	€10.828.528,0	32.673.844,0	117	€1.266.937.776	Car parks	€4.557.341,8	4.821.591,3	145	€660.814.561
Redevelopment areas	€9.778.394,4	10.984.467,0	50	€488.919.720	Redevelopment areas	€5.090.730,4	7.920.300,2	53	€269.808.711
Public health	€4.148.512,9	6.208.353,9	37	€153.494.977	Public health	€4.530.346,5	5.860.521,1	31	€140.440.742
Education and welfare	€4.322.259,9	3.970.785,5	21	€90.767.458	Education and welfare	€2.132.485,8	2.184.226,9	16	€34.119.773
Leisure time	€2.791.700,9	3.097.732,0	18	€50.250.616	Leisure time	€4.367.796,1	4.724.322,4	15	€65.516.942
Transport network	€47.659.376,0	1,0E+8	25	€1.191.484.400	Transport network	€18.206.654,0	25.760.495,0	15	€273.099.810
Tourist trade	€6.348.730,4	19.773.333,0	25	€158.718.260	Tourist trade	€3.236.777,0	3.655.560,3	28	€90.629.756
Various	€2.079.759,5	1.806.289,6	31	€64.472.545	Various	€2.967.279,9	4.220.673,3	47	€139.462.155
Total	€6.855.715,6	24.547.039,0	775	€5.313.179.590	Total	€4.216.073,2	8.147.519,7	915	€3.857.706.978

	Year 2005					Year 2006			
Category	Mean	Std. Dev.	Freq.	Total amount	Category	Mean	Std. Dev.	Freq.	Total amount
Water, gas, energy and telecommunication	€3.074.123,4	7.295.668,2	93	€285.893.476	Water, gas, energy and telecommunication	€5.808.036,7	16.716.679,0	120	€696.964.404
Tourist landing places	€19.278.594,0	16.301.129,0	16	€308.457.504	Tourist landing places	€25.417.677,0	55.272.919,0	12	€305.012.124
Street furniture and green belt	€483.053,3	982.783,0	206	€99.508.986	Street furniture and green belt	€733.605,7	3.397.145,7	127	€93.167.923
Cultural Heritages	€2.099.343,0	1.609.851,7	8	€16.794.744	Cultural Heritages	€8.159.466,7	13.291.641,0	3	€24.478.400
All-purpose centers	€7.565.911,5	14.285.206,0	11	€83.225.027	All-purpose centers	€7.835.533,7	11.136.743,0	11	€86.190.871
Cemeteries	€5.023.597,7	10.927.401,0	119	€597.808.126	Cemeteries	€3.976.166,0	9.504.938,3	110	€437.378.260
Commerce and craftsmanship	€4.127.566,6	9.588.631,2	46	€189.868.064	Commerce and craftsmanship	€3.302.922,9	4.400.651,7	29	€95.784.764
Office districts	€14.112.648,0	25.144.251,0	15	€211.689.720	Office districts	€5.750.000,0	4.596.194,1	2	€11.500.000
Environmental health	€8.805.145,5	11.569.219,0	10	€88.051.455	Environmental health	€5.323.824,4	12.375.247,0	7	€37.266.771
Sporting plants	€4.302.226,6	8.109.639,7	142	€610.916.177	Sporting plants	€5.510.812,5	15.216.620,0	135	€743.959.688
Car parks	€6.616.171,1	10.689.334,0	156	€1.032.122.692	Car parks	€4.989.699,7	9.261.066,4	118	€588.784.565
Redevelopment areas	€12.259.511,0	30.906.973,0	70	€858.165.770	Redevelopment areas	€11.019.954,0	17.633.758,0	49	€539.977.746
Public health	€2.593.760,8	2.612.692,7	29	€75.219.063	Public health	€4.576.205,7	5.389.605,1	26	€118.981.348
Education and welfare	€3.401.408,1	4.079.070,0	23	€78.232.386	Education and welfare	€2.494.303,3	2.711.726,0	27	€67.346.189
Leisure time	€3.888.838,4	5.773.330,9	21	€81.665.606	Leisure time	€8.646.686,4	16.978.648,0	26	€224.813.846
Transport network	€172.600.000,0	2,7E+08	7	€1.208.200.000	Transport network	€262.600.000,0	3,5E+08	6	€1.575.600.000
Tourist trade	€5.099.967,8	15.512.449,0	29	€147.899.066	Tourist trade	€2.085.937,5	2.905.687,7	16	€33.375.000
Various	€3.626.212,6	5.442.109,4	40	€145.048.504	Various	€6.281.999,3	9.370.608,7	26	€163.331.982
Total	€5.877.698,4	27.503.803,0	1041	€6.118.684.034	Total	€6.874.840,8	37.074.282,0	850	€5.843.614.680

	Year 2007					Year 2008			
Category	Mean	Std. Dev.	Freq.	Total amount	Category	Mean	Std. Dev.	Freq.	Total amount
Water, gas, energy and telecommunication	€4.641.372,4	10.458.369,0	135	€626.585.274	Water, gas, energy and telecommunication	€3.688.380,8	7.291.379,9	167	€615.959.594
Tourist landing places	€25.987.230,0	22.941.236,0	11	€285.859.530	Tourist landing places	€16.075.491,0	8.164.132,3	7	€112.528.437
Street furniture and green belt	€1.463.097,2	6.299.260,3	130	€190.202.636	Street furniture and green belt	€404.085,7	719.982,9	142	€57.380.168
Cultural Heritages	€4.062.274,9	4.946.558,2	7	€28.435.924	Cultural Heritages	€2.723.477,1	5.501.373,5	7	€19.064.340
All-purpose centers	€6.513.946,8	8.150.919,0	25	€162.848.670	All-purpose centers	€9.462.597,2	22.481.861,0	19	€179.789.347
Cemeteries	€3.621.708,2	6.998.989,4	97	€351.305.695	Cemeteries	€2.930.179,8	4.742.856,1	86	€251.995.463
Commerce and craftsmanship	€3.854.696,3	7.433.071,9	48	€185.025.422	Commerce and craftsmanship	€3.346.920,2	8.377.976,9	81	€271.100.536
Office districts	€18.523.240,0	29.087.753,0	9	€166.709.160	Office districts	€3.279.115,2	3.295.961,0	5	€16.395.576
Environmental health	€17.084.662,0	32.688.113,0	5	€85.423.310	Environmental health	€4.714.469,7	2.506.777,0	6	€28.286.818
Sporting plants	€3.290.811,4	6.575.209,5	172	€566.019.561	Sporting plants	€2.325.449,4	8.033.683,0	168	€390.675.499
Car parks	€4.984.911,6	8.046.204,4	130	€648.038.508	Car parks	€2.841.784,2	3.651.606,8	127	€360.906.593
Redevelopment areas	€14.858.459,0	-	47	€698.347.572	Redevelopment areas	€16.741.426,0	31.735.905,0	34	€569.208.484
Public health	€6.854.004,9	12.365.527,0	23	€157.642.113	Public health	€6.480.419,9	15.065.821,0	39	€252.736.376
Education and welfare	€3.903.784,2	5.439.088,5	42	€163.958.936	Education and welfare	€1.763.764,3	2.290.241,8	53	€93.479.508
Leisure time	€5.965.352,7	8.253.414,0	20	€119.307.054	Leisure time	€5.311.371,0	13.627.049,0	24	€127.472.904
Transport network	€56.452.449,0	58.176.348,0	4	€225.809.796	Transport network	€69.863.258,0	104.400.000,0	8	€558.906.064
Tourist trade	€2.410.054,6	4.758.229,6	31	€74.711.693	Tourist trade	€1.570.700,5	3.530.611,5	37	€58.115.919
Various	€2.126.040,1	1.851.589,0	31	€65.907.243	Various	€3.066.401,9	3.125.267,3	21	€64.394.440
Total	€4.966.016,7	13.137.368,0	967	€4.802.138.149	Total	€3.907.270,7	14.183.700,0	1031	€4.028.396.092

Tab. A 1 – Distribution of activity categories (tender values and occurrences), period 2003-2008.