halshs-00653090, version 1 - 23 Jan 2012

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Assessing the Obstacles and Shortcomings of PPP

Forthcoming in:

P. De Vries and E. Yehoue (eds.)

The Routledge Companion to

PUBLIC-PRIVATE PARTNERSHIP

London: Routledge.

halshs-00653090, version 1 - 23 Jan 2012

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ABSTRACT

Public-Private Partnership has been high on the agenda of public decision makers since the 1990's. Primarily a contractual approach to the delivery of infrastructures, goods and services traditionally provided by the public sector or by private operators submitted to tight regulation, PPP is also a very special contractual practice as it seeks to introduce market-type relationships in a context in which non-market forces play a major role. An important consequence is the overlapping of decision rights as well as property rights, which exposes PPP to a double alignment problem, organizational and institutional. Away from the ideological controversies about the legitimacy of PPP in provisioning public goods, this chapter focuses on problems rooted in the very nature of PPPs and the actual design of their supportive contracts, as well as in the institutions in which they are embedded and that define the capacity to implement and monitor these arrangements properly.

[1] Previous versions of this paper were presented at conferences and seminars in Delft (TU), Lausanne (EPFL), Singapore (NUS), Paris (Sorbonne). I am indebted to participants for their comments and to the co-editors (Piet de Vries and Etienne Yehoue) for their help and supportive suggestions. Nicholas Sowels helped polishing the paper. The usual disclaimer fully applies.

halshs-00653090, version 1 - 23 Jan 2012

JEL: L 14, L 16, L 24, L 51, L 9

1. INTRODUCTION

Public-Private Partnership, or Private Sector Participation as it is also known in a politically more sensitive terminology, has been high on the agenda of public decision makers, think-tanks, and consulting firms since the late 1990's. The World Bank Group has, for example, created a specific entity – the Public-Private Infrastructure Advisory Facility (PPIAF) – in charge of following up the development of these arrangements. The European Commission long ago delivered a Green Paper on the issue (European Union, 2004a). The OECD has produced several reports related to it, and the topic continues to feed the agenda and publications of numerous think-tanks (e.g., the French *Institut de la Gestion Déléguée*), as well as those of renowned private actors (e.g., PricewaterhouseCoopers). Such examples can easily be extended. And the number of conferences and publications on PPP is impressive. This raises questions: Why all the buzz? To what extent does it correspond to what is going on in the 'real' world? Is PPP a myth, a panacea, or an irreversible movement?

Public-Private Partnership (PPP) is primarily a contractual approach to the delivery of infrastructures, goods and services traditionally provided by the public sector or by private operators subject to tight 'command-and-control' regulation, such as public utilities. However, as rightly emphasized by New Institutional economists, PPP is a very special contractual practice as it seeks to introduce market-type relationships in a context in which non-market forces play a major role. Indeed, PPP refers to arrangements in which the allocation of property rights, as well as decision rights between public authorities and private operators overlap, with blurred boundaries when it comes to the delineation of some substantial rights and the distribution of risks. For example, a network can be built and operated by a private operator although public authorities remain the leading (if not the

halshs-00653090, version 1 - 23 Jan 2012

exclusive) investor, and may hold some important decision rights, as often happens in the water and sanitation sector. Another good illustration of overlapping rights is when a government transfers the construction, maintenance, and operation of prisons to a private operator while wardens remain under its control. The extension of overlapping rights in the delivery of goods and services considered of 'general interest' in the now received terminology determines the specific form of a contract and the resulting governance problems.

One way to explore the problems at stake in more depth is to restrict the analysis of PPP to those contracts associated with the delivery of 'critical services', understood as services essential to avoiding economic or social disruptions. These mainly include the provision of network infrastructures, such as water and sanitation, energy, transportation, or communications (Moteff *et al*., 2003; European Union, 2004b).[2] Such sectors are of particular significance because of their strategic impact on the economy (and the population) and because they actually involve a majority of investments under PPP arrangements. In this chapter, I mainly examine the role and difficulties of PPP relating to these network infrastructures. However, notwithstanding specificities such as the duration or the amplitude of investments involved, these arrangements share difficulties found in all other PPPs, which follow on from the partial and often ambiguous transfer of risks and responsibilities across public-private boundaries. These differentiate PPP from alternative solutions (full privatization or full integration in publicly owned entities).

Indeed, the specificity of PPP and related contracts results from the identity and role of the parties involved, which has an impact through at least three intertwined dimensions: (i) a legal dimension, since one party to the arrangement (the public authorities), also defines the rules

[2] The PPIAF (World Bank group) database focuses on these sectors.

halshs-00653090, version 1 - 23 Jan 2012

of the game and has a say in the implementation and respect of the clauses and requirements of the agreement; (ii) an economic one, since the player who is initially responsible for assessing the costs and benefits of 'going PPP' operates as subrogate for stakeholders – in last resort all citizens – who are **not** residual claimants;[3] and (iii) a political dimension, since the goods and services provided concern users who also act as citizens-voters, at least in democratic regimes, thus exposing decision makers to the risk of third-party opportunism. Taking into account these three dimensions means that institutional endowments, as well as institutional design are key factors in the decision to endorse a PPP and to choose the form it will take, with their impact on the solution selected deeply affecting its performance.

In what follows, I mainly focus on the economic dimension, although it is important to keep in mind the two other dimensions when it comes to the design (*ex ante*) and the implementation (*ex post*) of these arrangements. Actually, most arguments developed by the proponents of PPP relate to economic factors. The virtues expected from the participation of private interest in the provision of goods and services long considered as the 'prerogative' of government are now well-known and have been widely publicized, particularly by international organizations and lobbyists. They are deeply embedded in the shift of values regarding the economic role of government. The economic advantages of PPP are essentially seen to be gains in efficiency, thanks to incentives associated with private investments and their identifiable residual claimants. PPP should be particularly suitable when full privatization is not possible or very hard to implement, because of strategic issues (as in the defense sector), risks associated with major, long run sunk-costs (as in water and sanitation), or public resistance to the loss of control over critical resources (as with energy). A positive impact of PPP should show up in terms of:

[3] Hence, the often observed public outcry and the resulting tensions between parties to the contract when the private operator, which is the residual claimant in a PPP, makes large *ex post* profits.

(i) prices, since private partners have an incentive to reduce costs if the contract is properly designed;

(ii) increased productivity, as the allocation of labor will be less politicized;

(iii) increased output, given that revenues depend more directly on the rate of connection;

(iv) self-sustainability, since private participation requires revenues superior to costs, at least if risks are properly transferred;

(v) superior delivery of infrastructure and public services at a time of strongly depleted public finance; and last but not least

(vi) a reduction of political interference, thus reducing risks of corruption.

Of course, each of these presumed advantages has been challenged, with data often showing unpredicted increases in prices, lower investment than expected, increased corruption due to the small number of competitors involved, and short term budgetary relief opening the door to long term installments that burden public finances. Thus, from its beginnings, the development of PPP has been accompanied by strong controversy, even when we put aside ideological conviction, which is not an easy task when it comes to the positions endorsed by its proponents and opponents. Facts and figures about the actual performance of PPP, and its shortcomings when compared to the high expectations often generated, feed the debate.

The goal of this chapter is not to add one more brick to these ongoing controversies. It is rather to show that the potential advantages and possible failures of PPP are rooted in the very nature of its organizational arrangements and the actual design of contracts for which it provides an umbrella, as well as in the institutions in which it is embedded and that define the capacity to implement and monitor these arrangements properly. The resulting problem of adequacy between PPP as an organizational solution and the institutional framework in which

halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

it has developed help to understand many of the difficulties PPP faces, which are rooted in the intertwined allocation of rights, generating continuous tensions among parties. Notwithstanding considerable efforts to circumvent these problems, for example through more detailed contracts with more complex clauses regarding the transfer of risks and the responsibilities of parties, tensions remain that are apparently inherent to PPP and that partially explain its cyclical development, with significant ups and downs.

In what follows, I capture these difficulties in what I identify as a double alignment problem. On the organizational side, which is embedded in the contractual agreement, there is a problem of adequacy between the intertwined allocation of rights and the setting up of appropriate governance. This problem is particularly acute for network infrastructures that involve monopolistic segments remaining in the hands of 'public utilities' (e.g., transmission in the electricity sector, or rail tracks in the railroad industry).[4] On the institutional side, which refers to institutional endowments and the capacities of enforcement they determine, the special status of one party to the agreement, namely public authorities, comes out of its capacity to alter the rules of the game while the contract is ongoing. This raises a problem of adequacy between the contractual nature of the approach, which requires the transfer of substantial rights to a private operator, and the legitimate control that public authorities intend to keep over the delivery of goods and services considered as essential for and by citizens. In a sense, this double alignment problem reflects difficulties that are inherent to hybrid arrangements (Ménard, 2011), but that are amplified by the institutional asymmetry between the parties involved, which introduces a societal dimension to the problem.

[4] "Public utilities" is a misleading name in these cases since these monopolistic segments can be as well under private control (but usually tightly regulated).

halshs-00653090, version 1 - 23 Jan 2012

The chapter is organized as follows. The next section comes back to the double alignment problem more explicitly, with particular attention to PPP in the provision and management of network infrastructures. Section 3 summarizes some evidence illustrating the difficulties at stake. Section 4 looks more systematically at the 'alignment' problem rooted in the peculiarities and flaws of the contractual arrangements that shape PPPs and of the institutions in which they are embedded. Section 5 concludes with some remarks about the future of PPP.

2. THE DOUBLE ALIGNMENT PROBLEM

One important contribution of New Institutional Economics (NIE) has been to disentangle issues regarding organizational choices and those relating to institutional rules in which they are embedded, while simultaneously referring to a common set of concepts, mainly: property rights; modes of governance allocating and transferring these rights (with particular attention to contracts); and the related transaction costs. Indeed, along the organizational dimension (often identified as 'Williamsonian') as well as the institutional one (classified as 'Northian'), a key issue has to do with the adequacy of organizational and institutional solutions with the transactions at stake.[5] The interactions of these two dimensions when it comes to the provision of network infrastructures, which is the main focus of this chapter, help to understand the difficulties that the diffusion and implementation of PPP face.

2.1. The 'Critical' Nature of Network Infrastructures

PPP has raised particularly high expectations in the four sectors in which most investments are concentrated: telecommunications, energy, transportation, and water and sanitation. These sectors capture a substantial part of network infrastructures often described as 'critical'.

[5] For a general overview of NIE contributions, see Menard and Shirley, eds. (2005/2008).

halshs-00653090, version 1 - 23 Jan 2012

Critical infrastructure involves assets and services crucial to: (i) supporting economic development and growth, for example road systems or energy; (ii) maintaining socio-economic cohesion, which includes the provision of services guaranteeing property rights or safety of access to strategic facilities such as airports or ports; (iii) promote social goals inherent to developed economies, for example providing basic access to communication means or to safe water and sanitation (Moteff 2003: 8 sq.; Künneke *et al.* 2010: 496 sq.).

It is also in these sectors that PPP faces its most substantial problems. For infrastructure to meet the requirements above, it must satisfy conditions that make its development and maintenance particularly complex:

(i) The *scope* of transactions over which control must be exercised encompasses a wide set of parameters. Defining rights of access to transmission lines in the provision of electricity illustrates the difficulty.

(ii) Appropriate *control* mechanisms need to be implemented for guaranteeing the exactitude of goods or services delivered. Air traffic control provides an example.

(iii) Essential functions must be satisfied when needed, making *reliability* a key factor. Delivering safe drinking water or building and maintaining sewerage systems that prevent epidemics illustrate the importance of this criterion.

(iv) The provision of infrastructure must be conceived so as to guarantee *sustainability* in the long run, making the system economically and environmentally viable. The development of adequate public transportation illustrates the point.

This qualification of what is expected from critical infrastructure substantiates the double alignment problem (organizational and institutional) that PPP faces.

halshs-00653090, version 1 - 23 Jan 2012

To begin with, complex transactions are involved that require coordination between parties with distinct or even diverging preference functions. This is so within a specific infrastructure: for example, the production, transmission, and distribution of electricity need tight coordination among partners, whether they rely on public or private operators. For the latter, it also means arrangements based on sophisticated contracts, at least as soon as there is not a single firm in a monopoly position. Moreover, when the provision of the relevant critical infrastructure depends on partnerships involving private operators, parties are submitted to the monitoring of one of them, which inevitably creates asymmetric positions. Indeed, public authorities keep control over some strategic decisions, either directly, such as through a 'department of public works', or indirectly, when a publicly appointed regulator supervises the implementation of the contract and disciplines the operator(s).

Second, coordination is also required for infrastructures that are apparently independent from each other: for example, the efficiency of urban transportation requires complementarities among different means (bus, tramway, subway, etc.) but also with other infrastructures, for example, an adequate road system and the related sources of energy. The responsibilities for such coordination are never entirely in the hands of private operators. The intensity of public intervention may vary. Nevertheless, public decision makers necessarily interfere with operators on such issues. The result is a blurred area of decisions, which raises acute problems for PPP since parties have goals that differ substantially. Hence the importance and difficulty of allocating rights and risks in PPP, and the key role of the institutions framing the decision process of public authorities.

halshs-00653090, version 1 - 23 Jan 2012

Third, the delivery of critical infrastructure imposes significant investment with a life-cycle of its own, usually a long time span. An immediate consequence is that the corresponding organizational solution rarely fits with the political cycle, particularly in democracies: periodic elections mean that the strategy of the public authorities may change, challenging the viability of long term investments required from the operator(s). Indeed, as infrastructure concerns users who are also citizens, political interference is almost inevitable. This situation raises the question of the appropriate institutions needed to provide adequate incentives for the operator(s), such as securing property rights, guaranteeing autonomy in the exercise of decision rights, etc. However, there is a flip-side to the coin. Public authorities are also tied up by the arrangement: once PPP has been chosen to deliver critical infrastructure, political decision makers become vulnerable to the failures of their private partner(s). Many of the projects concerned and the commitments that accompany them are just "too important to fail": in case of threatening flaws, public authorities have strong incentives to compromise to keep the ball rolling!

Consequently, the critical nature of much infrastructure for which PPP is considered imposes specific constraints that differ from usual business-to-business contracts. It raises complex problems with respect to the adequacy of PPP, as an organizational solution, as well as with the capacity of existing institutions to support and monitor this solution properly. Moreover, as the characteristics above suggest, the two dimensions deeply interact.

2.2. Organizational alignment.

From an organizational point of view, relying on PPP for the production and delivery of critical infrastructure faces specific difficulties rooted in the constraints identified above, and

halshs-00653090, version 1 - 23 Jan 2012

shapes the nature of transactions at stake. First, network infrastructures involve heavy sunk investment, with a rate of return spread over the long term, so that risks of opportunistic behavior among parties are high. Second, they usually benefit from large economies of scale, which create important barriers to entry (and to exit as well!). Third, they benefit from what has been called a 'club effect': the larger the number of agents connected to the infrastructure or using it, the more beneficial it tends to be for the provider(s) and the more satisfying it is for users. Fourth, users benefit, or suffer, from these infrastructures over a long period of time. Fifth, because of these characteristics and because there is a tight connection between the role of users as consumers and as citizens, conditions under which services are delivered remain highly politicized, either through direct intervention, as when public authorities are in charge, or through different forms of regulation. In the terminology of transaction cost economics, these properties have a strong impact on the attributes of the transaction at stake (the contract in the case of PPP): the frequency of these transactions is likely to be low, with contracts mostly medium or long term; investments required are highly specific, meaning that once they are made they can hardly be redeployed to other activities; and uncertainty may be high, particularly if rights are not properly and clearly allocated. [6]

Indeed, although PPP may correspond to a variable transfers of rights, depending on the agreement, 'partnership' means that public authorities keep control over key property rights in the last resort, whatever the form partnership takes, which makes it different from full privatization. However, private operators also hold property rights, for example over facilities or the technology they may use: leases or concession contracts in the energy sector or rail

[6] Problems are partially different when it comes to the delivery of goods or services without network properties, such as building and operating a hospital or a prison and charging users, for example local or regional authorities, accordingly. However, even in these cases, the allocation of rights often remains a problem. Whether wardens in a prison operated through PPP should be under the control of public authorities or the private operator illustrates the difficulty well.

transportation illustrate this well. Similarly, although substantial decision rights might be transferred to private operator(s), public authorities usually keep control over key ones, for example determining tariffs or indexation formulas, or imposing constraints that make a contract subject to adaptation, as when local authorities own buses and determine the core characteristics of services to be offered while transferring the operation and maintenance of the system to a private operator.

Two important consequences result from this intertwined allocation of rights. First, the design of an adequate governance mechanism to reach joint decisions remains arduous, whether it has to be defined in the contract or whether it depends on interactions with regulatory authorities, or both. From a transaction cost perspective, PPP neither operates through pure market forms, nor is it a hierarchy. It is a hybrid arrangement, which poses specific problems of coordination, as we shall see later. Second, a controversial issue has to do with the ambiguous status of the residual claimant. Because rights are split between public authorities and the private operator(s), with zones in which they overlap, and because users are payers in-last-resort, as consumers or taxpayers or both, defining rights of the operator(s) as the residual claimant is a continuing source of tension and controversy.

In other words, PPP faces classical transaction cost problems, deriving from adequacy/inadequacy between the form of PPP chosen and the frequency of transactions under consideration, the significance of specific investments required, and the uncertainty regarding the status of the residual claimant. The status of PPP as hybrid arrangements, operating neither in a pure ‘market’ regime nor benefiting from the properties of an integrated organization (a ‘hierarchy’), makes the governance issue particularly difficult to solve.

halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

2.3. Institutional alignment.

As already mentioned the role of public authorities as party to the agreement and as decision maker with respect to the rules framing the agreement makes political interference almost inevitable. Even in one of the most radical experiences – the movement towards full privatization of network infrastructures in the UK – boundaries delineating rights changed repeatedly: for example, the rail network was renationalized following safety and financial problems and terms determining the price of water were redefined in the face of public pressure.

Contrasting public-private partnership with privatization on the one hand (the 'market' solution) and public provision of network infrastructures on the other hand (the 'hierarchical' solution) helps understanding its institutional specificity. With *full divestiture*, the key issue concerns the institutions required to secure property rights, including the role of agencies or courts in charge of guaranteeing the respect of commitments by the parties. A major difficulty with this solution lies in having institutions powerful enough to constrain deviant governments without being so powerful that they facilitate predatory practices. With *full public control* over network infrastructures, as with state-owned 'public utilities', the main problems stem from the lack of adequate incentives and the political interference that go with direct public monitoring.

In this respect, PPP clearly falls in-between these polar cases. As such, it shares the characteristics of hybrid arrangements linking private partners in business-to-business agreements, such as strategic alliances, franchising, and so forth (Ménard, 2011). Indeed, PPP involves joint investments between autonomous partners. It requires specific coordination devices to monitor shared resources. And it confronts problems of allocating risks and

halshs-00653090, version 1 - 23 Jan 2012

defining rent sharing rules since contributions and responsibilities are often hard to disentangle. At the same time, PPP differs from standard hybrid agreements among private partners because of the type of asymmetry involved, since public authorities operate simultaneously as a partner and as the instance defining and implementing the rules of the game, at least in last resort. Indeed, it must be remembered that even 'independent' regulators or judges are appointed by governments. The institutional matrix is therefore central as a support to PPP, but can also be a major source of misalignment when it generates high uncertainty and/or casts doubts on the securing of rights over sunk investments for the private operator(s).

Hence, deciding to choose PPP for providing and/or monitoring network infrastructures requires assessing the adequacy of existing institutions in at least three areas. First, are there political checks and balances that will limit the propensity of public authorities to reap the political as well as financial benefits of PPP, once specific investments have been made? Second, and symmetrically, are there enough administrative capabilities to monitor the agreement properly while avoiding the risk of capture by the private operator(s)? Third, and last but not least, is there a judiciary that has the competence and the authority to constrain parties when they stray from the agreement?

To sum up, finding if the 'right' institutions are in place or can be easily implemented, and finding the right mode of governance embedded in these institutions and fitting it to the properties of the transaction at stake remain major challenges and might be a source of conflict, inefficiency, as well as costly adjustments (Ménard, 2009). This double alignment problem might also explain many of the difficulties in the acceptance, development, and monitoring of public-private partnerships.

halshs-00653090, version 1 - 23 Jan 2012

3. THE SLOW AND UNEVEN SPREAD OF PPP

Indeed, notwithstanding high expectancies of PPP and the militancy of its promoters – particularly donors and international organizations, and private operators of course – the choice of this mode of organization in the provision of key network infrastructures remains relatively limited, and has evolved cyclically, with ups and downs since the initial boom of the mid-1990s. The sector and geographical distribution of PPP also provides valuable indications on the difficulties at stake.

3.1 From Water and Sanitation …

Water and sanitation systems have been high on the list of priorities of decision makers over the last two decades, because of their importance for the survival of human beings and the challenges they face with the massive migration of populations to major cities. This is particularly so in developing and emerging economies.[7] At the same time, the important sunk investment these systems require, in a context of tight public budget constraints, have made PPP an attractive solution, particularly when associated with financial commitments from private operators.

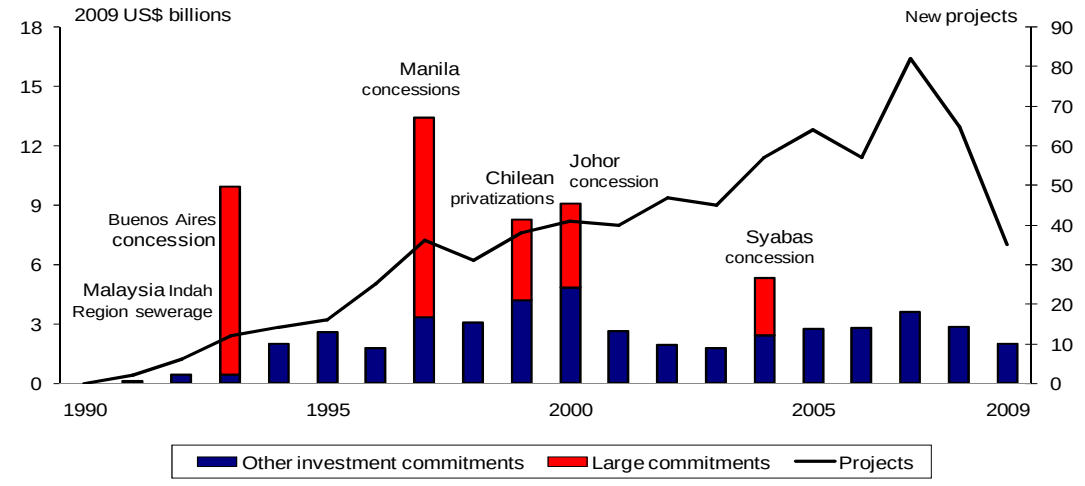
However, the results are far from meeting the expectations of intense private commitments. A study by Gassner *et al.* (2009) examined reforms implemented over the period 1992-2004 in all developing countries. Out of a sample of 977 cases in the water and sanitation sector, they identified 141 cases of private participation, 10 percent of which were total or partial divestitures, while the remaining 90 percent adopted various forms of PPP: mainly

[7] The problem is also important in developed countries because of aging water and sanitation infrastructures, and the massive investment their upgrading requires.

halshs-00653090, version 1 - 23 Jan 2012

concessions or lease and management contracts. State-owned entities thus remained the prevailing mode of organization throughout these reforms. The database developed by the World Bank on Public-Private Infrastructure (the PPIAF project) provides slightly more optimistic data. For the period 1990-2006 and for the same sector worldwide, 526 projects involving private participation were identified. However, when it comes to the significance of private commitments, they remain modest if a handful of major projects are excluded, projects that have not always been successful, as demonstrated by the case of Buenos Aires where the concession contract has been breached. Graph 1 illustrates these trends, making a distinction between 'large private investment commitments' and 'other commitments'. It clearly indicates how much PPP peaks depend on specific projects.

[INSERT GRAPH 1 ABOUT HERE]



Source: World Bank and PPIAF, PPI Database.

Graph 1: Investment Commitments to Water Projects with Private Participation in Developing Countries, 1990–2009 [8]

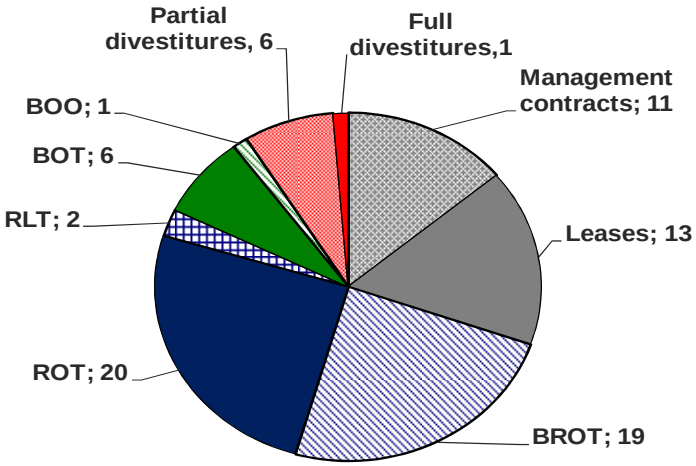
(Source: World Bank and PPIAF, PPI Database, 12-2010)

[8] In the PPI database, 'private participation' covers all forms of private involvement, from full privatization to merchant or lease contracts. See: http://ppi.worldbank.org/resources/ppi_methodology.aspx

halshs-00653090, version 1 - 23 Jan 2012

It is also interesting to look at the forms private participation has taken. Full or partial divestiture, which are variances of privatization, represent a very small portion of the projects, while contractual agreements with relatively low financial risks for the private operators involved have largely dominated, as the following graph from the same database confirms.

[INSERT GRAPH 2 HERE]



Graph 2: Water Utility Projects with Private Participation in Developing Countries, by Subtype, 2005–09

(Source: World Bank and PPIAF, PPI Database, 12-2010.[9])

3.2. ...to Other Infrastructure

[9] Note: ROT = rehabilitate, operate, transfer; BROT = build, rehabilitate, operate, transfer; RLT = rehabilitate, lease, transfer; BOT = build, operate, transfer; BOO = build, own, operate. The PPI Project Database classifies management, BOO, and BOT projects as greenfield projects, and BROT, RLT, and ROT projects as concessions.

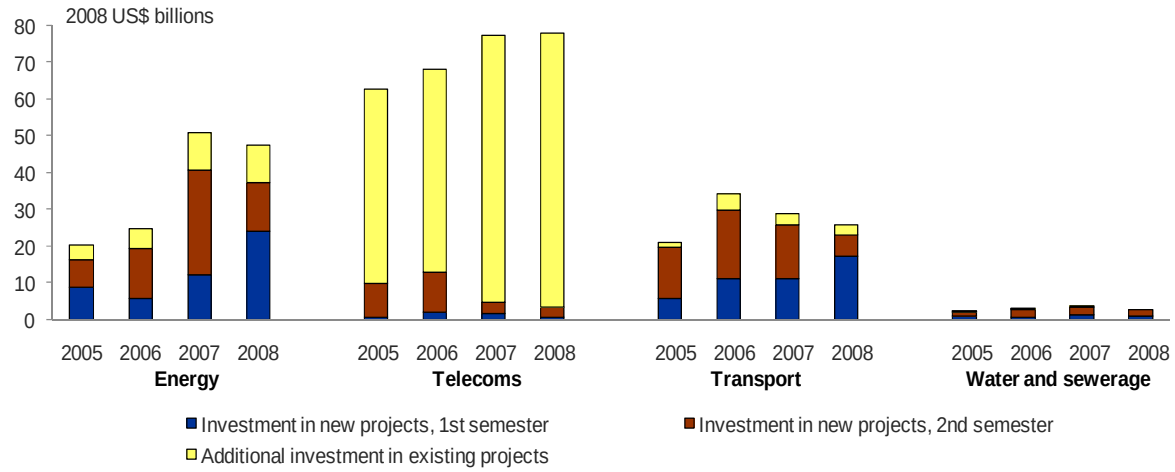
halshs-00653090, version 1 - 23 Jan 2012

Notwithstanding their importance for human beings and the high expectations that PPP could help meeting ambitious targets such as those defined in the 'Millennium Project' (UN 2005), water and sanitation *de facto* represent only a small part of PPP. According to the World Bank, for the period 1990-2000 this sector accounted for 6 percent of the total investment commitments to infrastructure projects with private participation and less than 3 percent in the years 2001-2008. At the same time, electricity represented 29 percent and 23 percent respectively, while telecoms took the lion's share of PPP, rising from 42 percent to 54 percent of the total. An OECD study of all forms of private participation in the MENA region confirms these trends:[10] over 84 percent of private investments in the network infrastructures of this region were concentrated in the energy and telecommunication sectors (Kauffmann and Wegner 2007: 13-17). More generally, it is in these sectors that full or partial privatization was the most significant. Out of the top ten companies involved in private participation for the period 1990-2006, nine were in the telecom business.[11] In other words, whatever form it took, private participation concentrated on the two most profitable sectors, namely telecommunications and to a lesser degree energy. Graph 3 summarizes this uneven distribution of participation among sectors, with the spectacular dominance of investment in existing projects in telecoms.

[INSERT GRAPH 3 HERE]

[10] The MENA region stands for Algeria, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Syria, Tunisia and Turkey.

[11] In the PPI database, private participation includes all forms of private investments. In the case of telecoms in developing countries, it represents almost all investments since there has been an only negligible public investment in this sector. As a result of the definition of PPP in this database, which includes full privatization, the data might underestimate the role of PPP in water and sanitation and overestimate its role in telecoms.



Graph 3: Investment Commitments in Infrastructure Projects with Private Participation in Developing Countries, by Sector and Implementation Status, 2005–08[12]

(Source: World Bank and PPIAF, PPI Database, 12-2010)

3.3 Geographical Concentration

Another significant indicator of the uneven diffusion of PPP is the geographical concentration of private participation. For the period 1990-2006, Brazil dominated PPP, followed by China, Argentina, Mexico and India. In the late 2000s, this hierarchy changed, with China and to a lesser degree India leading PPP. For example, in the water and sanitation sector alone, in which so much has been expected of PPP, 89 percent of the projects and 85 percent of investment involving private participation in 2008 where in China. (PPI Database, last consulted 12-2010). Interestingly, these investments also increasingly involved local entrepreneurs (the story is different for telecoms and energy, in which the trade-off is more polarized around full privatization or full public control).

The data provided above concern developing countries. However, similar conclusions can be reached for developed countries: PPP remains relatively marginal, concentrated in a few

[12] Date include investment in projects reaching financial closure in 1990–2008.

halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

countries and in the same sectors. In the UK, considered to be a pioneer and the most advanced country in the development of private sector participation through its 'Private Finance Initiative' (PFI) program, a report by Her Majesty's Treasury (Britain's Finance Ministry) in 2003 noted that over 85 percent of public investment was still delivered through conventional procurement, which is definitely distinct from PPP. A worldwide investigation on PPP by PricewaterhouseCoopers (2005) identified 206 projects in developed countries for the years 2004-2005, of which 50 percent were in Europe (including Turkey), mostly in the UK (all sectors), to a lesser degree in France and Portugal (roads and water) and Spain (ports, roads, water & wastewater). Australia, Canada and Japan were the main countries concerned outside Europe.[13] In some countries, there might even be a 'privatization reversal', with the reintroduction into the public sector of services previously delivered through PPP. Data collected by Warner and Hefetz (2007: 563 sq.) on local government service delivery in the US for the period 1992-2002 showed a progress of direct public delivery (from 54 percent to 59 percent), while complete contracting out went down, from 28 percent to 18 percent. At a more anecdotal level, Paris and Grenoble in France have abandoned their water concessions, switching back to a public 'régie', while the citizens of Munich and other German cities have rejected proposals to introduce private participation in the municipal provision of infrastructure and services (Ménard and Peeroo, 2011: 315-316).

In sum, whether we look at specific cases or examine aggregate data, evidence suggests at best a slow diffusion of private sector participation and in some cases a reversal of trends when it comes to the provision of key infrastructure and services through PPP. These

[13] Data may even overestimate the significance of private participation. For example a public corporation contractually involved in participation in another public entity might be classified as PPP (this seems to be the case for the water sector in Portugal, for example, or for public corporations investing in developing countries).

difficulties, and the resistance they reveal, might also be due to mixed results in the actual performance of PPP.

3.4 Assessing performance: mixed results

Indeed, besides the slow and uneven diffusion of PPP, another important indicator of the difficulties these arrangements face stems from their actual performance. Although we already have over 15 years of cumulated experiences and increasing datasets, assessing the performance of PPPs in order to determine whether the mixed results observed are due to organizational and/or institutional misfits is not an easy task.

One way to capture the misalignment between the choice of PPP as an organizational solution and the existing institutions is to develop cost/benefit analysis. However, this is not a simple exercise when it comes to assessing whether PPP was the right choice or not. First, finding the adequate data is not that obvious: for example, private companies operating in a competitive environment are legitimately reluctant to deliver information about their costs or their investments in specific projects. Second, changes in public policies (for example, in environmental or fiscal rules) might alter the significance of the data available. Third, and even more important to our approach, these costs and benefits require comparative evaluation: What they are? And what would they have been in an alternative organizational solution.[14]

However, numerous empirical studies have shown discrepancies between expected performance (including those specified in the contract) and observed results. Although most of them have emphasized failures in contractual design, several contributions have also

[14] For a good assessment of methodological issues at stake, see Gassner *et al.,* 2009, pp. 13-32. See also the pioneering paper by Masten et al. (1991) on assessing organizational solutions comparatively. Clarke *et al.* (2002) have proposed a methodology, applied to water reform in Guinea, to assess alternative solutions.

halshs-00653090, version 1 - 23 Jan 2012

exhibited the misalignment of the form of PPP chosen with the existing institutions. It is beyond the scope of this chapter to review these studies, but some lessons deserve consideration.

Two pioneering examinations of several reforms of water and sanitation systems involving private operators (Savedoff and Spiller 1999; Shirley *et al.* 2002) have shown how much the success or failure of PPP depends on the design of the contract and the governance it frames. But even more important are institutional endowments, particularly the capacity of the political system and the judiciary to monitor properly the relationship between public authorities and private operators. In many cases, the need for adaptation *ex post*, once the contract has been agreed upon, involves many jurisdictions and institutions, thus generating heavy economic and political transaction costs (see Ménard and Clarke (2002) on Conakry, Guinea; or Xun and Malaluan (2008) on Manila, the Philippines).

This is confirmed by several more quantitatively oriented analyses. In a pioneering econometric study, focusing on the French urban water sector, which has a long tradition of private sector participation, Ménard and Saussier (2002) revealed the mixed results in the performance of concessions and lease contracts, compared to public *régies* operating within the same institutional environment. Their explanation focused mainly on organizational misfit. Wallsten and Kosec (2008) reached similar conclusions about the urban water supply in the USA, referring rather to the conditions of implementing the rules of the game. In another study, Wallsten (2001) extensively examined reforms adopted in 31 countries in the telecom sector, which might be particularly favorable to the introduction of PPP or even full privatization, given the technological developments which have facilitated the opening of the systems, while the profitability of the sector made it very attractive to private operators. He

halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

had already shown that there was no significant effect of the reallocation of ownership alone on service coverage and labor efficiency. The key issue is rather whether competition has been introduced or not, as this points to the embeddedness of organizational solutions into their institutional environment. This is particularly significant, since in many cases concerning network infrastructures, PPP is introduced in a context of some competition for the market (often an opening limited to a few competitors), without competition in the market (once the contract has been allocated, the winner is in a monopoly position).

Last, the extensive study by Gassner *et al.* (2009) mentioned above goes beyond the water and sanitation sector, and also includes the electricity sector. It reviews over 1,200 reformed utilities, with 301 of them involving private sector participation, and the authors were somewhat more optimistic about the positive impact of PPP.[15] However, they also expressed serious concerns, particularly with respect to investment (p. 4 in general, p.39 for electricity, p. 45 for water). Increased investment per worker could indeed be largely due to reduction in staff numbers, with little actual new investment. Another interesting lesson from this study is that the form of private participation matters. In the words of the authors, "greater degrees of private participation [are] associated with stronger gains in productivity and service quality" (Gassner *et al.* 2009: 47).

These mixed results need to be explained. In line with my initial hypothesis regarding the double alignment problem, I shall argue that it is the organization structuring the allocation of rights and, in the last resort, the institutional capacities to implement and monitor the related transfer of risks that play a crucial role in the difficulties that PPPs face. It is this combination

[15] Strangely, in the initial version published as a working paper by the World Bank, the authors expressed a much more nuanced evaluation, concluding that '*the true impact of PSP may have been overstated in previous research.*' (Gassner *et al.*, 2007: 27-29. My emphasis, CM.)

that determines the attractiveness of PPP to private operators and frames the possibility for the new arrangements to meet expectations that might well have been too high from the very beginning, partially due to the ideological considerations of proponents of PPP.

4. WHY IS PPP SO DIFFICULT?

From a standard economic perspective, the slow diffusion and difficult implementation of PPP are quite challenging. Notwithstanding strong support from international organizations and public donors, as well as the favorable bias of governments viewing PPP as a way to develop infrastructure in a context of tight financial constraints, the slow adoption of PPP and the contrasted results of existing experiences cast doubt on the relevance of this organizational solution for the delivery of critical infrastructure.

In an extensive review of PPP in urban water utilities in developing countries, Marin (2009) summarized well the problems at stake:

> "It is clear from the many experiences of the past 15 years that public-private partnership is not a magic formula to address all the multiple issues of failing public water utilities in the developing world. For many governments in developing and transition countries, PPP projects have proved to be complex undertakings that carry strong political risks and large uncertainties as to the magnitude and timing of the expected benefits. Contractual targets are difficult to set and baseline data are seldom reliable; they generate many opportunities for conflict. Private operators do not always deliver and have a tendency to seek renegotiations to their advantage. Reforms can become easily subverted by vested interests. Many obstacles can lead to conflicts and costly early termination." (Marin 2009: 10)

These difficulties go far beyond the urban water sector or developing countries. For example, in France only 430 projects were recorded from 2004 to 2010. And this despite France's long tradition of private participation in key sectors such as water, sanitation, and multi-services,

halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

and notwithstanding the strong impulse the government intended to provide to PPP, with a favorable regulation adopted in 2004, followed by a supportive law in 2008. About one third of the projects concerned the renovation or construction of buildings, 25 percent the improvement of existing facilities (mostly public lighting), and 15 percent the delivery of sports and cultural facilities.[16] In other words, the development of PPP remained modest, with most projects being relatively minor ones and/or concerning a segment in the delivery of public goods or services that is not particularly complex.

Slow penetration might be temporary, due to the newness of the arrangement (although some forms of PPP go back to the 19th century!). Disappointing outcomes and the retreat from PPP to public provision are more challenging for conventional wisdom, which has strongly emphasized the potential gains of private participation. In addition, they challenge the view of economists aware of organizational issues, but who focused on the *ex ante* ambiguities in the allocation of property rights with little concern for their actual implementation and monitoring (Hart, 2003). They also challenge the view of economists aware of the institutional factors involved, who emphasized political opportunism of rent-seeking governments or political stubbornness fed by ideological motivations as preventing the adoption of solutions that would otherwise allow a 'high level equilibrium' to be reached (Savedoff and Spiller 1999: 13 sq.).

I do not deny the relevance of these factors. However, taken individually, they provide at best partial explanations: weak or badly defined property rights do not explain the failure of well designed contracts (at least from a theoretical standpoint) or the slow diffusion of PPP in

[16] Source: *Mission d'Appui aux Partenariats Public-Privé*, http://www.ppp.bercy.gouv.fr/liste_projets_extract_boamp.pdf. Last consulted: April 2011. See also Ménard *et al.* (2009)

countries with well-defined rights and adequate institutions to implement them; and political opportunism or ideological motivations can hardly explain some puzzling facts, for example, why has PPP developed so far mostly in Brazil or China. My point is that we should look at the overlapping of organizational and institutional dimensions that are at the very core of PPP, with a broader view of the resulting adequacy/misfit given the transaction at stake. It might be that difficulties lie in the combination of the *economic transaction costs* of coordinating partners and monitoring contracts with the appropriate allocation of rights, and the *political transaction costs* of establishing/adapting institutions and building a stable coalition in line with the choice of PPP for developing and/or upgrading network infrastructures.

4.1. The allocation of rights and the related problems of governance

Overlapping rights among parties to a PPP make transaction costs particularly significant. These costs follow from the complexities of defining responsibilities among partners, writing a contract that sets them out (the infamous 'ink costs'), determining and implementing procedures to attract and select private operators, and monitoring the relationship established under the type of PPP selected. This last aspect, the *ex post* implementation of a contract, is particularly significant because of the many problems and adjustments not anticipated at the time a contract is established. Coordination and adaptation problems resulting from the blurred areas of decision rights generate conflicts and repeated renegotiations. There is no simple governance solution to deal with these difficulties: finding the organizational arrangement that fits the transactions at stake is a major challenge. It is so because the property rights in which decision rights are embedded are unevenly distributed, with overlapping zones. These are issues that the term 'partnership' elegantly conceals. The development of regulation and regulatory agencies to monitor these problems, a solution that is quite universal since almost everywhere the provision of infrastructure involving private

halshs-00653090, version 1 - 23 Jan 2012

operators remains highly regulated, is a complementary source of complexity, and carries associated transaction costs.

The distinction between property rights and decision rights, partially inspired by the theory of incomplete contracts (Hart 2003; Baker *et al.* 2008), is helpful for understanding the issue of the appropriate allocation of responsibilities in PPP and the organizational misfits it possibly produces. Property rights refer to the control over the choice, implementation, and discard of assets, while decision rights concern the usage of these assets.[17] Of course, the allocation of these rights is also an issue in the polar cases of full public control (typically, state-owned enterprises) or full privatization. In the former, decision rights can be spread across different departments or ministries, handicapping the management of public utilities and the delivery of adequate infrastructure and services. In the latter, regulation and actions of regulators monitoring competition and guaranteeing the minimum coordination required by network infrastructures, for example in defining rights of access, can severely restrict the domain of choice for private operators and generate inefficiencies. Hence, failing governance due to poorly allocated rights is not the privilege of PPP.

However, the problem is particularly acute with PPP, because the rights of 'partners', which in principle should be distinct and well defined by the contract linking the parties, overlap *ex ante*, at the time the contract is designed, as well as *ex post*, at the time it is implemented. Moreover, sources of misfit coming out of the blurred allocation of rights differ according to the type of contract. The closer a contract is to public monitoring, as with management or service contracts, the more likely will conflicts relate to the allocation of decision rights, since

[17] In legal parlance, property rights refer to rules concerning 'usus', 'usus fructus', and 'abusus', so that decision rights are included within that concept. Therefore the legal definition only partially corresponds to the economic concept.

halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

private operators have no or very little control over property rights. Symmetrically, the closer PPP gets to full privatization, as with concessions, the more likely tensions will relate to the long run allocation of property rights, since risks of opportunistic behavior from governments increases once major sunk investments have been made by private operators. Unfortunately, we lack systematic data that would substantiate these differences.

4.2. Turbulences in contractual relations.

Nevertheless, some problems and consequences can already be pointed out from information collected in numerous case studies. First, the allocation of rights is closely interconnected with the allocation of risk among partners, a continuing source of tensions in PPP (and a much less consequential problem with state-owned enterprises or with full privatization),[18] because ambiguities in the delineation of rights and risks are almost inevitable. There are different types of risks at stake: technical, operational, financial, regulatory, political, and social. Although each type may require specific solutions, they all end up challenging the stability of PPP. Case studies and econometric tests converge on the significance of these sources of tension. In an extensive review of the introduction of PPP in the reform of the urban water system in Conakry (Guinea), Ménard and Clarke (2002: 273 sq.) identified inefficiencies resulting from the overlapping of risks and responsibilities, notwithstanding a relatively well designed set of contracts. These linked the public operator in charge of developing the primary network (SONEG –*Société Nationale des Eaux de Guinée*) and a mixed public-private operator (SEEG – *Société d'Exploitation des Eaux de Guinée*) responsible for the secondary network and users' connections. Although the arrangement (the core of which was a lease contract between SONEG and SEEG) resulted in a significant improvement compared

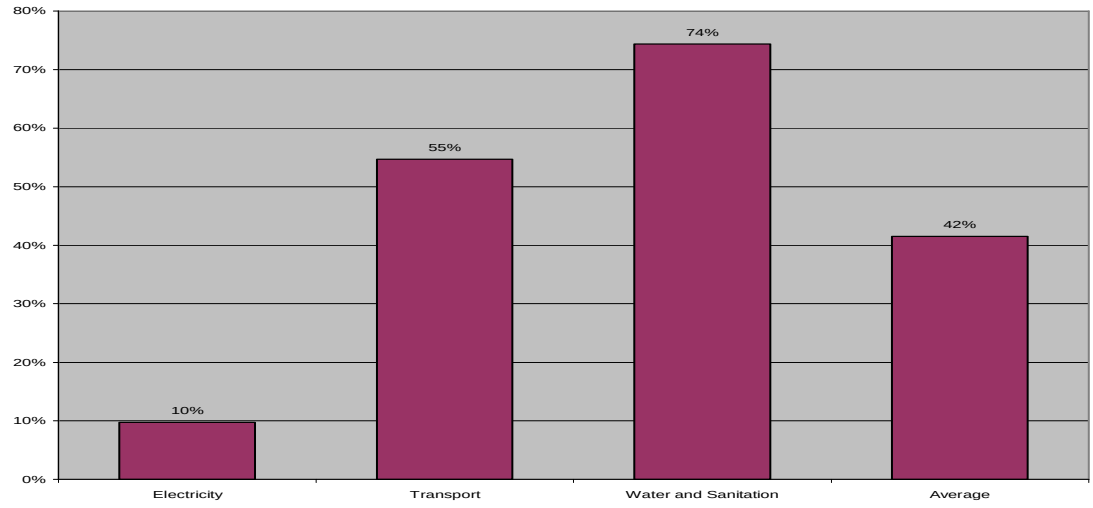
[18] However, there may be tensions between regulators and private operators about risks to be supported by the later in the case of full privatization.

halshs-00653090, version 1 - 23 Jan 2012

to the disastrous performance of the public provision of water before reform, repeated conflicts due to organizational misfits embedded in overlapping rights among entities with different goals and different preference functions ended up in continuing political interference. Risks and responsibilities were frequently arbitrated at the government level or even through international arbitration.

More generally, in an extensive survey of public-private partnerships in Latin America, with a dataset of over 1000 contracts granted from 1985 to 2000 and covering key critical sectors (water and sanitation, electricity, transportation, and telecommunications), Guasch (2004) has shown that overlapping rights and needs to adjust to changing risks ended up in systematic renegotiations. On average, renegotiation took place just 2.2 years after contracts were awarded, with a lower rate in the electricity and telecommunications sectors. In these industries, full privatization and/or more intense competition had led to defined rights and responsibilities. Conversely, the renegotiation rate was much higher in transportation and water and sanitation, notwithstanding contracts intended to be long term and the presence of automatic adjustment clauses, for example indexed prices. Graph 4 summarizes the data.

[INSERT GRAPH 4 HERE]



Graph 4: Concessions' Renegotiations in Latin America (1985-2000)

(Source: based on data provided in Guasch, 2004: Chap. 1, p. 13)

This dataset suggests that ambiguous risk-sharing, stemming from overlapping investments and overlapping responsibilities in dealing with exogenous shocks, results in little-tractable claims from public as well as private partners. What the data also reveal, through the contrast between water and other sectors, is that tensions and conflicts are particularly severe in contracts involving major sunk investments, with private operators facing financial risks related to exchange rates, and/or restrictions imposed on profit transfers, and/or political interferences, problems often amplified when foreign companies are involved.[19] Renegotiations have direct consequences on costs as well as on coordination capabilities, which may explain the increasing reluctance of private operators to assume major risks in PPP, which translates into a shift from concessions to less risky lease or management contracts. Moreover, higher financial costs for private operators born out of higher risk premiums might partially cancel out advantages expected from their participation. Institutional stability is a key element here, and it may help understanding some successes of authoritarian regimes in implementing PPP.[20]

Second, even with contracts of relatively limited impact, for example when key rights remain controlled by public authorities as with management or service contracts, monitoring arrangements might face serious difficulties, with both sides confronted to problems of expertise that can hamper their relationship. Private operators might not have all the

[19] This is well illustrated by the impact of the Asian financial crisis of 1998 on PPPs in Manila, or the role of the Argentinean crisis of 2001-2002 in the breach of contract between Buenos Aires and the consortium led by Suez.

[20] According to the PPIAF dataset, China has become the leading country for the implementation of PPPs over the last years, particularly in the water and sanitation sector.

halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

competences and resources required, for example because the size of the project or the technological knowledge needed exceed their capacities and this may push local authorities to address multinational firms. However, the latter might be reluctant to carry financial risks if political interference is a potential threat; they might require *ex ante* guarantees (for example, hostage clauses) that are difficult to implement *ex post*; and they have competences that might make access to information and monitoring the contract difficult for public authorities. Symmetrically, the public partner might lack skills to deal with complex contracts and to monitor them properly, often a major problem for small- and medium-sized cities and/or for developing countries with limited human assets. Ambiguities in the allocation of decision rights might also impede coordination, generating costly externalities: for example, reduced public managerial control when strategic decision rights are transferred to private operators might reduce the expertise of public authorities, leading to important monitoring difficulties. This issue of organizational alignment between competences of parties to the arrangement is well illustrated by problems of coordination of public transportation in several large cities worldwide, which might speak in favor of increased public control or 'pro-active' planning of private interventions (Barter 2008: Section 3).[21]

These difficulties in assigning and implementing rights and responsibilities translate into transaction costs. *Ex ante*, bureaucratic costs for parties to PPP might be significantly higher than expected. In a lecture on the potential role of PPP in the development of infrastructure in Africa, the then European Commissioner Louis Michel emphasized the resources the establishment of such partnerships requires from public bureaucracies, donors, local

[21] More dramatic consequences of the ambiguous allocation of decision rights were illustrated by the initial problems of coordination, resulting in severe accidents in the British railway system after its privatization (Yvrande and Menard, 2005: 676 sq.).

halshs-00653090, version 1 - 23 Jan 2012

authorities, and private operators.[22] The problem is that we do not know much about these costs, and what they represent comparatively to the administrative costs of organizing the provision of the same goods or services by public entities. Yet, there are indicators suggesting they are not negligible, for example the small number of private bidders in so many cases because costs of bidding are too high.[23]

Ex post, conditions of implementation may also be taxing. For example, the frequent renegotiations pointed out above involve direct administrative costs for both sides. They also involve indirect costs, particularly those related to the weakened credibility in commitments, which is partially reflected by the evolution of risk premiums. Moreover, assessing the advantages and costs of PPPs should also take into account the costs of those projects never achieved at the very stage of their initial design, or adopted but never implemented, or initiated but abandoned *en route*. According to the PPIAF database, 267 projects involving private sector participation were cancelled or distressed over the period 1990-2008, representing a mere 6 percent of the total number of projects, but 8 percent of investment and over 37 percent in the water and sewerage sector.[24] This might suggest that PPP, as an organizational solution, does better in sectors with low sunk investments and might be much less adapted to sectors with highly dedicated assets, for which the adequacy of institutions matters greatly, since it mitigates or amplifies risks.

Once again, the lack of adequate data to substantiate the significance of these costs is unfortunate. However, indications suggest that difficulties in delineating and implementing

[22] "Panafrican Public-Private Partnerships," Brussels, November 30th, 2007.

[23] Of course, this is also true in developed countries, in which PPP tends to be extremely procedural in order to prevent capture, corruption, etc., with high costs for bidders, thus reducing dramatically their number.

[24] Last consulted: December 10, 2010.

halshs-00653090, version 1 - 23 Jan 2012

rights through contracts translate into lengthy and costly procedures, often amplified by detailed guidelines that seek to prevent, *ex ante*, risks of opportunism or corruption, as well as by devices created to control the *ex post* implementation of such agreements. For example, on average over two years and often up to five years were taken up from preliminary studies to the beginning of actual investment in PPPs, among the 15 members of the European Union, for the period 2000-2005.[25] It must be emphasized that these delays are particularly significant because they are averages, including a majority of relatively simple projects developed under particularly favorable conditions with respect to institutions and human capacities.

Last, there is also a drawback to these complex procedures, which is often ignored or underestimated. This concerns the rigidities they introduce in contracts. Indeed, there is a tradeoff between establishing constraining rules to prevent opportunism on both sides of partnerships, and thus introducing rigidities that generate costly adjustments and potential conflicts on the one hand, and choosing more flexible rules that facilitate adjustments but might cancel out the advantages expected from competitive pressure on the other hand (Andres *et al.* 2009). This tradeoff is particularly acute for projects with important long term sunk investments.

4.3. The Nature of Contracts Involved: What it means to have a 'Relational' Contract with the Public Sector

Similar problems exist in business-to-business agreements. However, they take particular forms when it comes to PPP. Indeed, by definition, PPP encompasses key requirements

[25] My calculation (CM), based mainly on PricewaterhouseCoopers (2005, particularly pages 29, 31 and 64). See also for France, Ménard *et al.* (2009)

imposed by public authorities upon private operators. Of course, requirements also exist in business-to-business contracts. However, there are specificities to PPP.

First, notwithstanding the possibility of negotiating, these are contracts in which, in the last resort, one party imposes the rules of the game and can unilaterally alter them while the contract is being carried out. Second, the long term properties embedded in the delivery of infrastructure and/or in the goods and services expected from them make these contracts almost inevitably incomplete; the transaction costs of establishing detailed contracts with well defined adjustable clauses to adapt to changing circumstances in the long run are far too high, most of the time. It also means that changes and adaptation must be expected and will have to be monitored. Part of the adaptation is relatively 'formalizable', as with the periodic adjustments to variations in the price of energy in contracts for public transportation. But many adjustments are also based on 'informal' agreements, in that their properties and even the procedures for determining them are not made explicit in the contract. Typically, risk sharing in long term projects obeys this logic of quite informal rules and procedures, as illustrated by PPP in the defense industry (Oudot and Ménard, 2010: 199 sq.).

Actually, 'informal' is not the right term. As suggested by Goldberg (1976) and Macneil (1978) and developed by Baker *et al.* (2002, among others), such adaptation is better captured by the concept of 'relational contract', in which substantial clauses are more concerned with procedures than with specific content. Now, relational contracts raise specific problems when it comes to partnership between public authorities and private operators: how 'relational' can a long term contract with the public sector be? The standard approach has emphasized the risk of capture of public authorities or their regulatory bodies by private operators, for example, corrupting civil servants to get a contract or to modify an existing one (Martimort and Straub

halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

2009: 69 sq.). This is surely a concern, but there is more to the story. As emphasized by several contributions in line with New Institutional Economics, there is also the risk of government opportunism, with public authorities changing the rules of the game while the contract is underway, or changing the interpretation of existing rules (Levy and Spiller 1994: 202 sq.; Shirley and Ménard 2002: 17-25.; Guasch 2004: 60 sq.; Spiller 2010). Notwithstanding similarities with risks that characterize private contracts, this opportunistic behavior differs because political power can impose changes in the rules of the game, given States' general monopoly of force (North *et al.* 2009: 13 sq.).

There is another, long-ignored aspect that makes relational contracts particularly risky when it comes to PPP: the risk of opportunistic behavior by third parties. The continuous pressure which interest groups can put on public authorities goes far beyond traditional lobbying by private operators. For example, lobbying by environmentalists, user associations, etc., leads democratic governments towards the implementation of rigid contracts with private operators (Spiller 2009: 45 sq.). In order to avoid criticism by such third parties, that have strategic interests of their own, or to avoid the risk of being accused of biases due to the influence of these groups, governments tend to negotiate and write contracts that are much more procedural than those among private parties.[26] This makes adaptation almost inevitable, and particularly costly. This is true *ex ante*, for example because it imposes particularly stringent conditions at the time bids are opened, thus reducing the scope of potential competition. And it is also the case *ex post*, with conditions of implementation that might seriously infringe on the managerial capacity of operators.

4.4. Institutional misfits: political transaction costs.

[26] See Bajari and Tadelis (2001), although their paper is not specifically about PPP but more generally about contracts between public authorities and private operators,

halshs-00653090, version 1 - 23 Jan 2012

The resulting rigidities, as well-intentioned as they might be, translate into high economic transaction costs, as well as what North (1990) identified as political transaction costs. Indeed, one important component of these costs comes out of the institutional alignment or misfit in the rules of the game framing the implementation of PPP. Institutions provide an essential support in making commitments credible and facilitating implementation, but they also impose constraints that translate into costs for both parties to partnerships.

Legislation, which delineates the space within which contracts are designed and implemented, is particularly relevant here. To secure transactions and provide adequate incentives, relatively comprehensive legislation is needed, with private operators looking for guarantees while public authorities need to legitimize their choice of PPP. Establishing an appropriate legal framework is not that obvious, as illustrated by its slow progress in the EU: laws regarding PPP were only recently adopted in Spain, Ireland, and France (as late as 2008) while drafts are still being discussed in most other EU members, as well as at the level of the European Commission. The existence of a well defined legal system and of a powerful judiciary can also carry ambiguous effects. On the one hand, it makes commitments credible: parties are aware that in case of diverging interpretation or conflicts, they can go to arbitration and, in last resort, address courts. On the other hand, legal support might turn into legal impediment, since it introduces rigidities in the negotiation, costly procedural obligations *ex ante* as well as *ex post*, and as it is rooted in diverging national traditions, making the task of international operators complex and costly. The success of PPP therefore depends on a delicate equilibrium between the need for a legal support and a judiciary that make commitments credible; and the risks of a system that is either incompetent, imposing arbitrariness on parties, or powerful enough to engage parties in highly procedural and costly relationships.

halshs-00653090, version 1 - 23 Jan 2012

Then, of course, there is the issue of political institutions. By definition, PPP involves government/public authorities. Therefore, rules delineating the political decision process, for example the presence or absence of checks-and-balances to restrain the risk of capture by political parties, or the existence of political institutions that reduces the duration of negotiations or that facilitates the resolution of disputes, are important factors to take into account.[27] Another dimension is the existence of a competent and uncorrupted bureaucracy to support the political decision process and the implementation of the contract once it has been approved. The adequacy of such institutions is a strategic factor in the success or failure of PPP.

To sum up, complex institutions are needed to secure PPP. However, the implementation of appropriate institutions is path dependent, may have a pace that by far exceeds that of PPP, and can result in high political transaction costs, up to the point of paralyzing the adoption of otherwise advantageous arrangements between public authorities and the private sector. For example, the costs of establishing a consensus among policy makers to avoid future challenges and accusations of favoritism may result in rigidities that translate into slowness in negotiations and costly renegotiations, generating misfits between expectations and delivery of public goods and services. These critical difficulties of adaptation often provoke negative reactions of users who are also taxpayers… and voters.

4.5. From misfits to users' dissatisfaction.

The resulting tension between the rigidities introduced in PPP to avoid risks of capture and the need for adaptation has an important impact on how this organizational solution is

[27] For a pioneering econometric analysis of the impact of political and other institutional factors in choosing PPP as an organizational solution, see Hammami *et al.* (2006).

perceived by citizens. Risk of dissatisfaction is a major concern for the development of PPP and may have dramatic consequences when it comes to the point of challenging existing agreements or even pushing towards the breach of existing contracts, as illustrated by the now well-known case of the termination of the contract for the provision of water between Buenos Aires and a private consortium led by Suez.[28]

The creation of user committees, often at the initiative of one of the two parties, is a clear signal of this concern.[29] Yet there are few studies on the perception of PPP by citizens. Bonnet *et al*. (2006: 7-16) have extensively reviewed polls on different forms of private sector participation (including full privatization) in Latin America, from 1998 to 2005. After initial, highly positive expectations of these arrangements, dissatisfaction rates increased systematically, pushing governments to slow down or abandon strategies favoring private sector participation, or even reneging on existing contracts. Casual evidence pointing in the same direction is found in user reactions to the privatization of water in England and Wales, which pressured the regulator (OFWAT, the Water Services Regulation Authority) to revise the rules of the game before the date agreed upon initially. Most of the time, dissatisfaction crystallizes around clauses of contracts perceived as penalizing important categories of the population (typically prices or rates and/or costs of connection), pinpointing what is viewed as bad organizational design. Dissatisfaction may also relate to the conditions of implementing and monitoring the agreements by public authorities (typically problems of insufficient control or corruption). These relate to the inadequate institutional rules and flaws in authorities' capacities to enforce a contract.

[28] Such cases are particularly significant because they challenge the reputation of parties involved and, above all, the very image of PPP as an adequate solution.

[29] Examples are the French *Commission Consultative sur les Services Publics Locaux*, created by law; and many users' committees initiated by operators such as Suez or Veolia to facilitate the acceptance and monitoring of their contracts in developing and emerging countries.

halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

One important underlying question is whether this dissatisfaction is durable or 'transitory': i.e.: whether the difficulties in switching from public provision to private participation are due to a slow learning process, particularly on the public side, or if it stems out of the inadequacy of PPP, when it comes to the delivery of network infrastructures. One source of tension in PPP is that public authorities often address private operators to solve problems they cannot monitor anymore, or that could have a negative impact on the political career of policy makers: for example, financing the renovation or expansion of existing infrastructure through taxes, increasing revenues of the operator so as to satisfy the needs for new investments, improving productivity by firing surplus employees, reducing opportunistic behavior among users such as illicit connections through tighter control and penalties, etc. Under these conditions, reforms involving private participation translate into prices rises; layoffs so that employment in the utilities concerned falls; metering households to control their actual consumption better and thus pushing up bills, etc. These measures feed opposition from vested interests, but also skepticism among larger segments of the population. Empirical evidence, such as periodic polls about the perception of PPP in France by the *Institut de la Gestion Déléguée*, or the rejection of private participation in the provision of public services in several German cities illustrate the significance of these negative reactions and the fact that they are not confined to developing countries (Ménard and Peeroo 2011: 322 & sq.).

It is not easy, and can be quite costly to monitor this dissatisfaction in order to contain or reverse this perception, through better information about the long term effects of private participation, compensation for laid-off employees, protection against disruption of services for the poorest households etc. This is not only a matter of communication or public relations: it might impose a different approach to contracting with private operators, for example with

the more active participation of users which may also translate into reduced efficiency and higher costs for the operator, or with changes in institutional rules that may challenge the legitimacy of policy makers or significantly deprive their capacity to monitor the development of infrastructures continued to be considered as 'public services'. Resistance from citizens who do not perceive value for their money in the changes involved, or from policy makers facing the perspective such dissatisfaction could feed and often does signal the end of PPP.

5. IS 'NO FUTURE FOR PPP' THE VERDICT?

In this paper, I have attempted to point out some major difficulties that PPP is facing. I have argued that it has to deal with a double alignment problem. On the organizational side, a key issue is the allocation of rights. With PPP, the distinction between property rights and decision rights is particularly relevant since they are often partially dissociated from each other in the different types of contracts, while at the same time they correspond to an allocation of risks and responsibilities between public and private partners that often overlap. The resulting imbrications of rights lead to economic transaction costs that might be high or even intractable, either because of the complex issues to be solved *ex ante* in establishing the contract, or because of the costs of disentangling responsibilities and risks in the *ex post* implementation of the contract.

But there is more to the story. On the institutional side, PPP requires credible commitments among parties in an asymmetry of positions of a very special type. Indeed, one party (the public authorities) also makes the rules of the game, which opens room for significant arbitrariness. This is not to say that private operators are left without defenses: they may capture the rule maker, for example through corruption; they may influence the decision

halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

making process, for example through lobbying; or they may even rely on institutions that partially prevail on local ones, as with multinationals going to international arbitration. Of course, all of the above are particularly significant when it comes to partnerships that involve important sunk investments, which is often the case for network infrastructures, which have attracted the largest volume investment under PPP as an organizational solution. The difficulties in finding an adequate institutional environment lead to political transaction costs.

All of these difficulties are embedded in the relational nature of contracts at stake, with 'relational' having a special meaning here, precisely because of this interaction between the properties of the organizational solution (and the blurred allocation of rights that often goes with it), and the characteristics of the institutions involved (with high risks of opportunism that they may facilitate). Ongoing financial uncertainties have amplified these difficulties. Even in institutionally stable countries, PPP has slowed down. According to the pro-PPP *Financial Times*, Britain's long celebrated PFI (PPP) program has seen the number of deals and their value fall to their lowest levels for a decade, and the causes of this might go beyond short term problems. Indeed, a recent paper in this newspaper concluded: 'The bigger question is whether the balance of risk and rigidity truly benefits the public sector. Too often, projects have turned out to require additional public sector support when the private sector has run into difficulties.'(*Financial Times*, January 15, 2010). Actually, the number and value of projects worldwide has had ups and downs repeatedly, since PPP bloomed in the discourse of international organizations and donors, as well as governments in the 1990s. All in all, private sector participation remains modest. For example, the pioneering PFI program, often cited as remarkable, remained the tip of the iceberg of British investment in infrastructure. According to a report by Britain's Finance Minister (the Chancellor of the Exchequer), dated 2010: "The

Private Finance Initiative (PFI) is a small but important part of the Government's strategy for delivering high quality public services." [30]

Nevertheless, PPP is likely to remain relatively high on the agenda of policy makers and to develop, although slowly. There are several reasons why it should be so. First, financial constraints on public authorities, which have been amplified by the financial crisis, are not going to diminish anytime soon. Second, the need for major investments in infrastructure is going to put increasing pressure on politicians, particularly with the rapid expansion of large urban agglomerations almost everywhere in the world, and the rapid development of inter-regional and international trade. Third, incentive issues and related dissatisfaction with the public provision of goods and services requiring major sunk investments and tight coordination will feed expectations of better management, which creates pressures to raise private sector involvement. Fourth, ideological motivations, which feed suspicions about the role of government, will also support the idea that PPP is a solution, if not the solution to public investment!

However, progress should remain slow and relatively modest, and might be accompanied by a switch in the type of PPP, for reasons explored in this chapter. On the organizational side, these include: the significance of investments at stake, at least when it comes to network infrastructures; the risks of governmental opportunism, since the political cycles differ so much from investment cycles; and the pressures from third parties, which tend to make

[30] http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/ppp_index.htm, National Archives. According to this data set (last consulted November 29, 2010), 667 projects were signed from 1996 to 2010, many of them of relatively limited size.

halshs-00653090, version 1 - 23 Jan 2012

contracts between public authorities and private operators increasingly rigid. These trends result in a paradox when it comes to the choice of contract: on the one hand, data suggests that more rights transferred to private operators tend to make contracts more efficient; on the other hand, risks facing private operators push them to favor management or lease contracts so as to avoid the high risks associated with substantial sunk investments. Hence, we can expect the development of mild forms of PPP in the future, mainly in management and services contracts.

This tendency should be amplified by institutional factors. Making public commitments credible in order to secure private investment and guarantee adequate rates of return, rather than systematically allocating risks to public authorities or donors, are issues that have been explored quite extensively by New Institutional Economists. They have exhibited the role of checks-and-balances in the political system; of a strong and independent judiciary; and of autonomous and competent regulators, as key institutional actors (Spiller and Levy, 1994; Spiller and Tommasi, 2005, Chap. 20). However, changing institutions to attain these goals is hard. It is a long term process with a lot of 'trial-and-error' and no guarantee of success (North *et al.* 2009: 32-55 and 112-122). One major difficulty is the implementation of institutions that are strong enough to limit political arbitrariness and third party opportunism, but flexible enough to allow adaptation. The lack of such an institutional environment in so many of the countries that most need private sector participation will push in the same direction as organizational issues, in other words towards the development of quite mild forms of PPP.

halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

To sum up, Public-Private Partnership in building network infrastructures and contributing to the delivery of public goods and services is going to stay with us and to progress. But one may also quite safely predict that: (1) this participation will remain limited when it comes to major investment and will rather contribute by providing adequate managerial capacities, so that management and lease contracts should prevail; (2) building institutions that fit the needs of secured private participation will remain high on the agenda of policy makers and international donors, but will also challenge our poor understanding of what adequate institutions are and how they impact on the interaction between public authorities and private operators. These issues are of great concern to decision makers, but also define an important research agenda.

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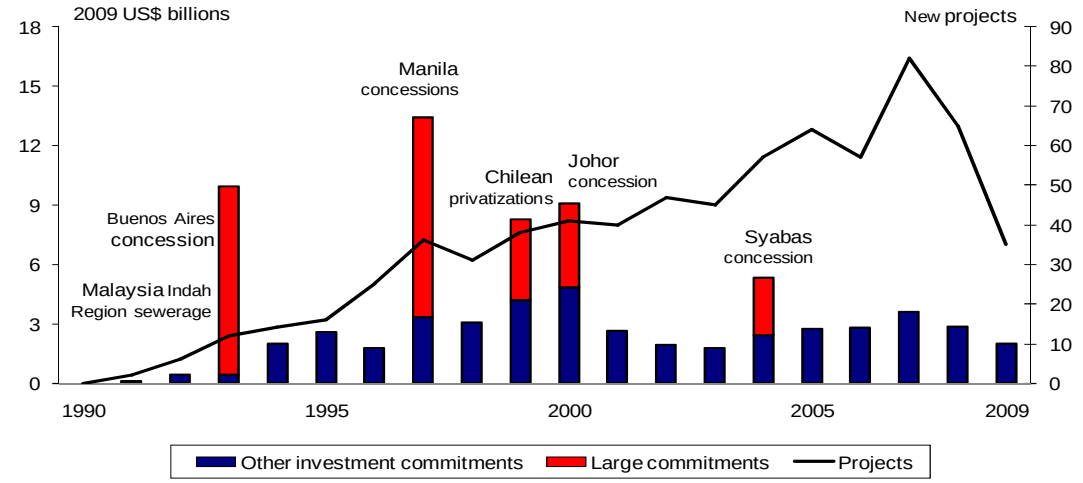
halshs-00653090, version 1 - 23 Jan 2012

halshs-00653090, version 1 - 23 Jan 2012

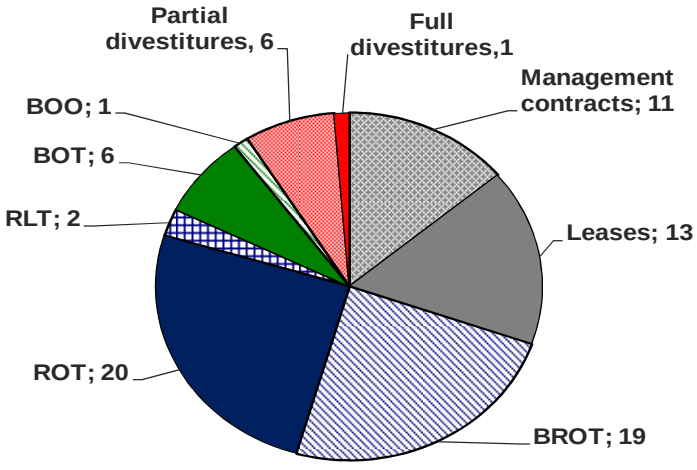
GRAPHS AND FIGURES

GRAPH 1



Source: World Bank and PPIAF, PPI Database.

GRAPH 2



halshs-00653090, version 1 - 23 Jan 2012

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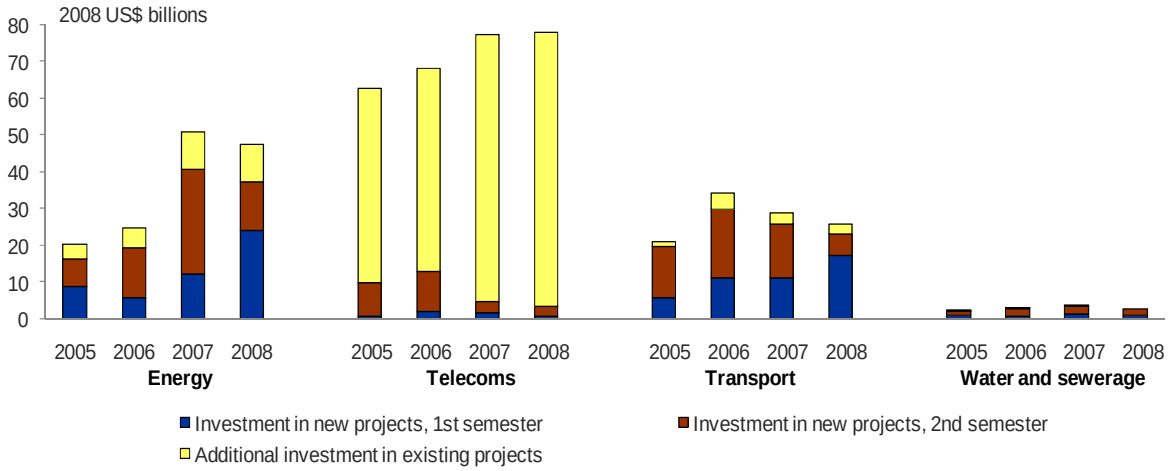
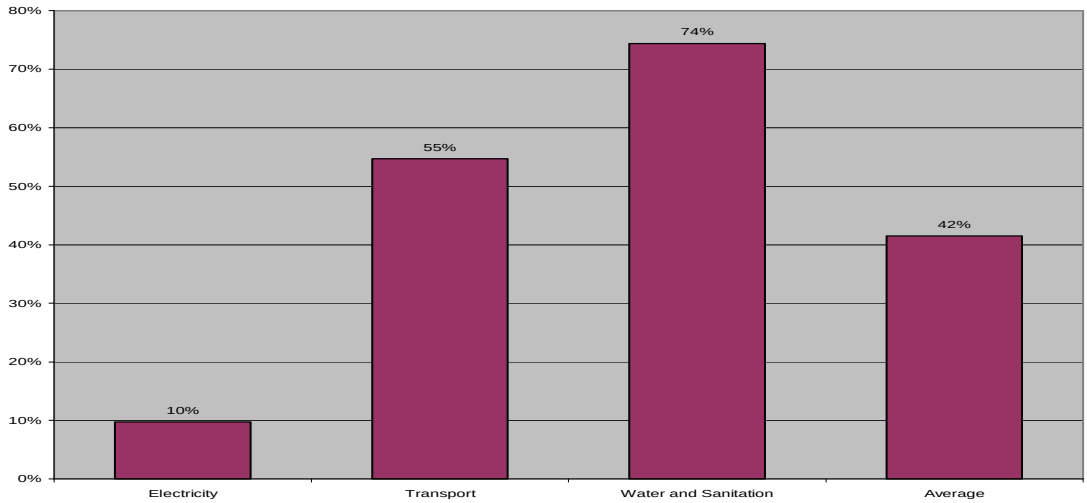
GRAPH 4