Private Infrastructure: Ten Commandments for Sustainability

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Introduction

The last five years have seen a significant increase in the participation of the private sector in infrastructure development, particularly in developing countries. This trend has received a great deal of attention from practitioners, as reflected by the many conferences and seminars that are taking place and the number of articles that are being written about it. Statistics confirm the growth of private sector participation, particularly in emerging markets, but also in most developed countries. However, the projects that have reached closure seem to be below the expectations that have been created[2]. The apparent gap between the amount of interest stirred and the relatively few completed projects call for an answer to a key question: Is this a passing fad or does it reflect a permanent change in the way infrastructure is provided? The answer depends largely on how the transition process is handled and how the new framework is managed.

The intensity with which some countries have faced the change seems to point to a permanent change. However, we should remember the cycles that the ownership and management of infrastructures have gone through in the last century. At the turn of the century, railroads, irrigation and the supply of power, water and gas were promoted, financed and managed primarily by private sector enterprises. The pervasiveness of the private sector was common in all continents. With time, infrastructure firms were regulated and nationalized. Although the timing of public sector involvement in infrastructure was not the same in the different countries, periods of war and economic recession triggered waves of nationalization in most countries. In the late fifties, infrastructure services were largely provided by the public sector. The drop in the quality of these services, which was associated with the participation of the public sector, turned the tide and generated a wave of deregulation and privatization during the seventies. We seem to be at the crest of this wave now. The question, which does not have a clear answer, is aimed at determining whether this is a fad or an irreversible process. To be a lasting process, a number of conditions, presented in this paper as the **ten commandments of sustainable private infrastructure**, should be met. First, however, we analyze the reasons countries have for choosing to incorporate the private sector into the provision of infrastructure and will briefly review the modalities in which private sector privatization occurs and their impact on the relationship between government, the private sector and consumers. Even though what follows is mostly addressed to developing countries, there are many lessons for developed countries as well, particularly those in which public services have been traditionally in the hands of the public sector, like most countries of the European Union.

Reasons for Private Sector Participation

There are several reasons for the public sector to incorporate the private sector in infrastructure development, and reasons vary among countries. Nevertheless, even when reasons are common to various countries, their significance in the decision-making process is usually very different. For instance, in the emerging economies of Asia, the main reason was the **scarcity of government resources** to finance the infrastructure needs to support economic growth and competitiveness. In Latin America, despite differences among countries, the reasons for privatization also included the need to reduce the impact on public finances of utilities companies' **deficits**, political pressure from society due to **low quality and poor coverage** of services, and the need to **generate funds** through privatization in order to finance economic stabilization programs or to meet social needs. Let us analyze the case of Latin America in more detail. In this region, the assumption that the private sector will provide a service more efficiently has been one of the main incentives of the process and one of the key differences with Asian experiences. Furthermore, in some countries, especially those that have completed the first stage of privatization, other reasons include the creation of investment opportunities for the private sector, **the inflow of capital and imported technologies and the development of capital markets**. In sectors such as telecommunications and electric power, technological innovations have enabled and encouraged the participation of the private sector.

For developed countries, the main motivation appears to be the reduction in the cost of the service and enhancements to the technologies through competition between private sector suppliers. In some special cases, such as Spain and other European countries, the need to meet the goals of the Maastricht Agreement (public sector deficit reduction) requires the reduction of public investments without jeopardizing economic growth. In a few of these countries, where economic growth is influenced by the construction industry, which in turn depends on government contracts, privatization allows for stable investments in infrastructure without affecting public finances. Private sector participation in new infrastructure is one option that can dampen economic cycles. In fact, in the lower parte of the cycle, in which government income drops and social expenditures rise--unemployment benefits in particular--governments cut back on public works investments to control the deficit. The decrease in government investments is one of the factors leading to a further contraction of economic activity, thus diminishing the availability of government funds. This would not be the case if infrastructure investments were in private hands.

At this stage in the discussion a caveat should be made. In order to reduce the impact on their budgets, some countries are stimulating private sector involvement through methods that might not be sustainable in the long term and that might not take full advantage of the benefits of such an involvement. These methods have one common feature; they all benefit from accounting imperfections that include only current expenditures in the current budget while leaving out the present value of any future commitments. For example, governments may assign the construction but not the operation of a power generating plant to the private sector, with payment either deferred until the delivery of the project or in annual installments through a lease contract. One characteristic usually shared by these schemes is that the projects are more costly than if they were carried out by the public sector. This is owed to the fact that they include the cost of financing, which tends to be higher for the private sector, without benefitting from private operation of the project, whose efficiency may offset some of the costs. This argument of the impact on the current budget **should not be** one of the reasons to stimulate private sector participation.

One important observation has to be made to conclude this brief analysis of the motivations of countries to bring the private sector into the area of infrastructure. Improved efficiency is on almost every country's list of reasons to incorporate the private sector. It is assumed that the private sector will provide services more efficiently than the government. However, this premise is not universally correct; it depends to a great extent on the characteristics of the public sector and the specific project. It appears to be more valid in Latin America than in Asia and noticeably less valid in developed countries. Also, the cost of financing for the private sector should be expected to be higher than for the public sector. There is hardly any private investor with a risk lower than the sovereign risk. The participation of the private sector will be effective in reducing the cost of servicing the debt inasmuch as the increased efficiency offsets the higher costs of financing through better service at a lower price. This cost reduction will not always be possible, and it is then that the public and private sectors will have to devise risk mitigation systems--especially for political risks arising from institutional and regulatory instability--so that the incorporation of the private sector can effectively reduce infrastructure costs, particularly financing costs.

Modalities of Private Participation

Not all participation of the private sector in infrastructure takes place through privatization. In a very general sense, the word "privatization" is used to describe what we prefer to call "private sector participation". In a more strict sense, privatization refers to the transfer of ownership of the assets of an existing public work to the private sector, although some people will also include infrastructure projects originally owned by the private sector. Nonetheless, there are many types of private sector participation for which the concept of privatization is inappropriate. This includes cases that do not involve a change in the ownership of the existing project or assets or that refer to a new project built under a concession agreement. Private participation can range from a mere contract for the administration of activities such as bill collection or asset maintenance, to management of a public enterprise (with a contract based on either performance, net profits, revenues or fixed or variable management fees), to concessions on assets which include operation, investment and financing responsibilities.

Privatization is the extreme case and is applicable to an existing or a new project wholly owned by the private sector (a new power plant, for example). Privatization is a complex and controversial type of private participation. Not only because, in general, it involves the sale of assets that the public may consider theirs or because it creates monopolies, but also because of the controversies created in the valuation of the assets. In countries where political will or consensus is not broad, these difficulties tend to favor concession agreements or other types of private sector participation instead of privatization. Governments use privatization in the case of industrial and commercial companies in areas where monopolies are not likely and products are easily marketed at set prices. In the case of infrastructure the options available will depend on the marketability of the product, the likelihood of a monopoly, the level of utilization of public goods and the possibility of identifying the consumers.

In more developed countries, almost all services currently offered by the public sector exhibit some kind of the above mentioned private participation modalities. In less developed countries, private sector involvement in many services is still not significant. Each one of the participation modalities entails different rights and obligations, incentives and penalties. In particularly, they entail different responsibilities for the public and private sectors regarding the more relevant aspects of the service being offered: ownership of assets, financing and control of revenues, costs, maintenance and renovation, etc. The mode of participation suitable for each case depends on many factors, the most important being: political consensus, capacity of the private sector, types of assets and services offered, quality of service prior to private sector involvement and the degree of utilization of infrastructure for income redistribution. In the case of water supply, for instance, a lack of political consensus regarding the transfer of assets to the private sector, poor service and high investment needs that the government cannot meet, make the option of concession with responsibility for new investments the most suitable one. If it is not possible to find a private company willing to commit to investments under these conditions, contracting the service with payments based on overall company performance would then be the appropriate mode of operation. This brief description is aimed at illustrating the wide range of possibilities in order to better understand the conditions needed for sustainable private participation.[3]

Consequences of the Change

In order to design and maintain a program of private participation in infrastructure, it is important to identify the changes that would accompany it and act accordingly. Under a public ownership system, the private sector has a supplier-client relationship with the public sector, whereas with private sector participation the relationship takes place directly with the consumers and users. The public sector, in turn, has to represent the interest of consumers and users while also looking after the interests of the private sector. For example, when the public sector hires private construction services for a project, the terms and conditions of the contract are clearly defined. When the public sector grants a road under a concession agreement, the revenues of the private sector depend to a great extent on the users, the length of the agreement is substantially longer and thus the contract will have to include covenants that allow for the changing economic environment.

These new relationships generate a number of complications that may jeopardize the success and continuity of private participation. There are two new sets of relationships:

1.- Public Sector-Private Sector Relationship: New Risks to be Mitigated

This relationship is covered by what can be called the "public-private contract", which includes the actual contract (for management services, concession or sale of assets) and all applicable legal and institutional regulations, including management supervision by a government agency or an independent regulatory entity. This contractual relationship introduces a series of political or public sector behavior risks, such as the payment of subsidies or fees (if required, say in potable water systems), fuel supply (when it is in the hands of a government monopoly), purchase of a service (when government has the monopoly over power supply), setting of rates, changes in environmental and safety standards, unilateral changes of the rules of the game, etc. In the traditional contractual relationship the risk for the private sector due to the behavior of the public sector was limited, in most cases, to the risk of payment for the construction of the project. In some countries, the risk perception stemming from the decisions of the public sector--usually referred to as political risk--is very high, cannot be mitigated and severely limits private sector participation.

2.- Relationship between the Private Sector and Consumers: Change in the rules of the game.

In private infrastructure, the private sector has a direct relationship with the consumers (if it provides services such as electricity, water, telephone, etc.) which gives the service provider a new responsibility: consumer service. In traditional schemes the public sector is in charge of this area. In the new schemes, the private sector has to be sensitive to the needs and demands of consumers. As service is provided by the private sector, the expectations of quality rise and consumers demand their rights. The private sector should be aware of and prepared for this new relationship.

The Ten Commandments of Sustainable Private Infrastructure

The economic advantages of the participation of the private sector in the provision of infrastructure services seem obvious. Therefore, countries have begun a shift towards the new systems. However, it is likely that the participation of the private sector could introduce problems and costs that exceed the expected benefits. Results will have be assessed empirically and most likely some cases will be documented which show social benefits while others will show that the private provision of infrastructure services was detrimental. In spite of this, the little evidence gathered so far suggests that the advantages of private sector involvement exceed the disadvantages, although it is still too early to draw general final conclusions.

Nevertheless, these experiences allow us to state that the probability of successful private sector participation increases if certain rules are followed. These rules have been grouped into ten commandments that point the way for reaping the benefits of private infrastructure.

In general, the prospects of long-term sustainable participation of the private sector--which is the subject of this paper-- will increase as the terms of this participation are more business oriented, even more so if the participation involves direct ownership of the assets. It should also be noted that even though the discussion that follows makes a few general statements, these should be taken cautiously because every country is different and every infrastructure sector has characteristics that make it unique. The following conditions are, in general, applicable to all cases in varying degrees, but they are country and sector dependent.

1. Thou shalt obtain a commitment from the government and consensus among the political forces that represent a majority in Congress

An unconditional commitment from the government is essential for the participation of the private sector. This is due to the fact that a large section of society believes that these services should be provided by the public sector (in a few cases this principle is even expressed in the country's constitution). Additionally, in many countries infrastructure services are used as a mechanism for income redistribution--and not necessarily to the private sector. Government commitment, however, is not enough. A political consensus is also necessary because the implementation of new schemes will, in many cases, require congressional approval. Furthermore, infrastructure works have, by definition, long economic lives, and the return on the investment has to adapt to such terms in order to keep the service for the current generation at reasonable prices. These terms are certainly longer than the term that an administration has in office. It could be counterproductive if the private sector were to undertake investments in infrastructure expecting all returns within the tenure of the current administration. Even if there is a political consensus, to be successful, the process by which the private sector is incorporated has to be irreversible within one political administration, otherwise there is the risk of the new government reversing a process which has already started. The fourth commandment elaborates on this aspect.

2. Thou shalt inform the public about the process, its advantages and its costs.

The participation of the private sector in the provision of public services can be controversial and questioned on the social front. Infrastructures use public assets and provide services that consumers have been accustomed to receiving free of charge or at rates substantially below cost. It is imperative, therefore, that the public be informed.

The information provides should explain the government's strategy and policies, reasons for the change, conditions under which participation will take place, use given to the revenues obtained and particularly the benefits obtained from private participation, and costs and risks of the process. Society should understand that the new scheme has advantages, but that in order to realize them it is necessary to incur short-term costs, perhaps with hikes in subsidized service rates. It is also important that the process of project allocation is understood, done with transparency and using competitive processes as much as possible.

The dissemination of the proper information is a complex task. The groups that are against change make convincing arguments that may sway the uninformed general public. Current and future stakes are enormous, the economic and political power are very high, and the advantages of private sector participation are neither evident nor universally accepted. A sound advertising campaign is essential in order to overcome reluctance. Its design should bear in mind that those who benefit from the change are many, but they have little information and are scattered, while those who stand to lose are few, but have a wealth of information and are usually very well organized.

3. Thou shalt develop participation within a thorough and flexible legal framework, with

clear and transparent rules of the game.

Infrastructure works are developed and operated over long periods of time during which changes in the economy, the government and the balance of ideological forces take place. Additionally, they are operations that require large financial commitments, and are very complex, as they generally involve a multitude of users. This calls for a stable and reliable legal framework and for the awards to be based on clear, unambiguous rules that are known by all. In many countries, these legal frameworks tend to have numerous imperfections at the start of the transition process; they are developed with other goals in mind. In the interest of speeding up the process, the framework tends to be neglected or its development takes place simultaneously with the process, or even later. There is not a single best way to implement the participation, but it is highly desirable to have a previously developed legal framework so as to avoid the high costs that the private sector will impose to compensate for the uncertainty. It is possible to do both things simultaneously, develop the legal framework and allow private participation, and some countries have done it in order to take advantage of the window of political opportunity, but the additional costs should be carefully taken into account.

The scheme should also be flexible. Given the lack of experience of the countries and the characteristics of each case, it is not possible to devise ahead of time a system that accounts for all contingencies. Both parties may prefer a rigid system that allows them to know exactly what to expect, thus avoiding uncertainties. This preference at the time the project is awarded should be balanced with the need to cope with inevitable changes during operation. This paradox involving the needs for flexibility but certainty can be solved by defining, in the most precise manner possible, the contract revision procedures.

4. Thou shalt carry out the project award process with due diligence and thou shalt select the most qualified group for construction, operation and financing.

In many cases governments want to take advantage of the window of political opportunity that, for example, a new administration offers. The whole process of private sector participation in infrastructure is hastily pushed forward. The temptation is strong, but it usually leads to allocation of services without a proper analysis of the best approach for participation of the private sector, to cloning of inadequate models form other countries, or to awarding projects to less-than-optimal consortia. Although there are exceptional cases in which a fast-track process can be justified, due either to the need to solve a problem (e.g. lack of electricity, inoperative telephone lines) or to break the resistance of a government bureaucracy opposed to changes in the *status quo*, the process has to be carried out with extreme care at all times and determining whether or not the benefit obtained by cutting corners or abbreviating a stage justifies cost.

This does not mean that the process has to be slow. Quite the opposite. The political consensus needed for these kinds of changes usually lasts for short periods of time and has to be utilized to start the process and, if possible, complete the incorporation of the private sector. Even when it is impossible to complete the process in two or four years--the key period usually--the regulatory and institutional framework should be left in place and a few projects and services should be completed. The process should become irreversible within this period.

Since many infrastructure projects involve the utilization of a valuable public goods, the allocation of that asset has to be done competitively. This is the only way of determining and obtaining the maximum value of the asset and hence protecting the interest of society. Sometimes the business that identifies the need for a project wishes to automatically receive the concession rights for exploitation of the service, especially since it has already incurred preparation expenses and has committed resources of its own. This is a dangerous policy. However, direct allocation could be considered under exceptional circumstances, for instance when the concession for exploitation of a service does not make intensive use of public goods and as long as the second commandment is always observed. In other words, give information about the process and explain the reasons why the process of competitive bidding is not being used. Even in these cases of low utilization of public goods, competitive allocation is also advisable because it leads to the best price and tends to generate more revenue for the government.

An infrastructure project is characterized by a large investment, utilization of public goods, inflexibility and long-term returns. Therefore, the successful operation of the project depends on each and every one of its developmental stages: award, financing, construction and operation. Equal attention should be given to the technical and financial qualifications of the participants of every stage. Good construction companies do not always have the operating capacity or are capable of obtaining proper financing. Under traditional systems, construction companies gain experience in the awarding and construction processes. However, the new systems demand expertise in long-term financing, project operation, consumer service, etc., areas in which construction companies tend to lack experience. The operator of an infrastructure service is always perceived as the least important link of the project due to the relatively routine nature of the tasks. Nevertheless, a mediocre operator can damage the entire private participation effort not only its own sector but also, as a spillover, into other infrastructure services. Operation is the most visible aspect of the process to consumers.

If a consortium is unable to continue operating a public service infrastructure, the government will need to intervene or transfer operation to another private consortium. The negative impact of the private participation will be notable. It is not like the bankruptcy of an industrial or commercial company which would have few consequences for society.

5. Thou shalt appoint the best officers to the regulatory agencies, grant them independence from government and the private sector, and give them a capacity equivalent to that of the private sector.

By putting the private sector in charge of the provision of a service the government does not waive its responsibility for the public service, it only changes the type of responsibility, which can even bring an increase in its technical and political complexity. Granting the service to the private sector means that the government has to adopt legal and institutional mechanisms to ensure that the service is provided efficiently and the responsibilities assumed by the private sector are fulfilled. The responsibility is heightened because the inefficiencies that the public used to accept from the government will not be tolerated from the private sector. The higher the rates the consumer pays for the service, the higher the expectations of improved service. Ensuring the proper legal framework prior to concession is just as important as guaranteeing that the supervising agency is qualified and independent during the implementation of the project. Given the lack of experience in this area and the shortage of qualified personnel, governments may wish to take over supervision and assign staff from the traditional bureaucracy. The personnel of the regulatory agencies should be capable of negotiating with the private sector on equal footing. This requires a level of professionalism and pay comparable to that of their counterparts. Strong supervision is in the interest of the private sector. Just like effective bank supervision is one of the main assets of the financial system, competent and independent regulatory agencies will be assets to the public services system. A public service under concession, even if managed by the private sector, continues to be a public service subject to all kinds of political pressures. Once the provision of a service is in private hands, its oversight has to be independent from the government but with an authority that matches the power of the private sector. Otherwise, regulatory capture by either party, public or private, is imminent. This has proven to be the cause of many failures and what sets apart a successful process from a failed one.

6. Thou shalt commit the government and the private sector to the success of the operation.

A sustainable process of private sector participation depends greatly on the level of commitment from both the public and private sectors. If one of the participants has little at stake, the process runs the risk of being reversed, having a negative impact not only on the particular infrastructure but on the entire process.

In order to minimize its risk exposure and maximize benefits, the private sector will try to invest as little of its own resources as possible in terms of both financial and institutional assets. When the restrictions of the financial markets create this situation, it becomes necessary that the reputation of the groups that have been awarded the project be excellent; since they provide few financial resources they should at least put their prestige on the line. On the financial side, it has to be ensured that the private sector has its own resources exposed during the critical periods of exploitation. In many cases, capital contributions are returns obtained from the same construction contract, with few fresh resources and with the expectation of obtaining a quick return on the capital. Even if this does not mean that the private sector has intentions of abandoning the project, it does indicate the level of commitment and willingness to endure adverse situations that probably will take place. The award of an infrastructure project should be done in such a way that the long-term commitment of the private sector is ensured. A scheme involving sponsors/operators with poor reputations and small contributions of fresh capital is a recipe for disaster.

The public sector also has to show its commitment. This is more difficult, however, because the political system itself provides for the rotation of high public officials, thus favoring the development of short-term vision. One of the best indicators of the public sector's commitment is its willingness to expose its political assets by making the participation of the private sector one of the key elements of the government plan. Another indicator is its willingness to obey the third (legal framework) and fifth (regulatory framework) commandments.

7. Thou shalt not mix social and commercial goals.

In a traditional system the public sector usually manages infrastructure projects without distinguishing between social and business goals. The public project and service is often used as a vehicle for income redistribution. The incorporation of the private sector should be accompanied by a clear separation of the two goals. The private sector should become involved only with services in which that separation is viable. It should be noted that regardless of the method of incorporation, such a separation is almost always possible. For instance, if for reasons of income redistribution a road is to be built in an area where the volume of traffic is not enough to recover the investment, then construction, financing and operation of the project may be awarded to the private sector, but the government will have to pay a fee to supplement the revenue from toll collection (if the fee that the public sector has to pay accounts for a significant share of the operator's income, the financial risk will lie on the public sector and it would probably be more convenient for the government to finance the project directly). Another possibility is for the government to cover a portion of the investment costs through a contribution to the project's return. In the area of water supply social and commercial interests often intertwine. Let us assume that, due to social considerations, the rates cannot reach a level that would permit the private sector to cover its costs. Private participation in such a case is nevertheless viable. The municipality would have to either pay a percentage of the rate or assume part of the construction cost. Other possibilities include an authorization from the municipality to set rates that carry a cross subsidy from higher-income to lower-income groups, or payment by the government of a percentage of the consumption of the lower-income people.

The modalities of participation are different and so are the incentives perceived by the private sector. The important part, however, is that the private sector should control the costs, revenues and investments of the operation that are strictly commercial, and that the social objectives should be clearly identified and separate from the commercial objectives, thus insulating the private sector from income redistribution considerations.

8. Thou shalt distribute the costs and benefits with justice.

Both the public and private sectors wish to obtain the highest benefits possible from the operation, but each party has different interests that usually do not coincide with those of consumers: the final judges of the operation. Moreover, during the implementation of a project the circumstances that led to the public-private contract tend to change, affecting the distribution of benefits and costs. The most important aspect of a sustainable private participation is the continuity of the agreement between the parties regarding that distribution. If the project is awarded through a competitive process, the initial distribution is usually equitable. If it has been directly awarded, the distribution will greatly depend on the negotiation skills of the parties and the pressures to which they are subject. In the latter case, it is quite likely that, at the start of operations, the distribution is not found to be equitable, despite the efforts made to ensure that it is.

When negotiating the contract, the parties should acknowledge the possibility of errors and include provisions for renegotiation. For example, the private company may earn unusual profits. It is important to determine the causes: efficiencies achieved by the company, initial overestimation of costs or excessively high rates. The negotiation and solution for each case is different. The company should be allowed to keep the benefits derived from its efforts, but it should also admit awarding mistakes--if they occurred--and accept the corresponding remedial measures. Under no circumstance should the company flaunt the benefits that the public is accustomed to consider as social entitlements from a public service. Unforeseen additional costs can also arise, such as the need for larger investments, as dictated by the government (to serve a larger portion of the population) or as a result of tighter safety or environmental regulations. The government should be willing to cover the costs arising from its decisions. Benefits should accrue to those who generate them and costs should fall on those who cause them, but not to the extreme of privatizing benefits but socializing losses.

9. Thou shalt provide the private sector with the incentives necessary for its participation, but only those that are necessary.

The following two commandments are closely linked and it is relatively difficult to separate them, but for the sake of an explanation we shall try. The ninth commandment refers to measures that affect return and the tenth to measures that affect risk. No special incentives are needed for the participation of the private sector in industrial, commercial and financial activities because the opportunity to make a profit acts as the incentive (except when the government introduces noncommercial elements). Although infrastructure investments also have profit as an incentives, certain characteristics and risks might call for additional incentives. For instance, in countries with a high political risk, the initiation of the process of private participation in the area of telecommunications could require a contract with a monopoly clause for a certain number of years. In the case of a toll road, the contract could limit the construction of alternate routes (also for a certain number of years) or could guarantee a minimum volume of traffic. In the construction of a hydroelectric power plant, in view of its strategic inflexibility and the high risk involved, the localization right could be granted free of cost.

As seen, all these incentives limit the forces of the market and therefore should be analyzed and justified according to the need for true compensation for market imperfections. It is not a matter of "giving away" benefits that belong to the public. The private sector might tend to overestimate these market imperfections and the need for operating incentives. The best route is the competitive allocation of the projects, as set forth in the fourth commandment, and awarding incentives only if they are requested by all the bidders or if the market imperfections are clear.

10. Thou shalt not permit that the risk mitigation schemes of a project jeopardize the process of private sector participation.

As a result of its characteristics (large investments, longer terms, public goods, multiple players, large economic and political interests, etc.), private infrastructure faces a number of political (mentioned earlier), commercial (construction, operation), financial, legal and force majeure risks. These risks should be borne by those who are most capable of mitigating them or absorbing them. Though this may appear trivial, many of the problems of incorporating the private sector into the management and financing of infrastructure services are caused by an economic agent who is unable to manage the risks it assumes while preventing an agent with better mitigating capacities from assuming the risks. A few examples will illustrate the significance of this.

Let us consider the case of a private power supplier who tries to avoid the commercial risk of selling electricity by selling it to the state-owned company at a fixed price through a "take or pay" contract. The supplier is exchanging a commercial risk (sales) for a sovereign risk (the state-owned company's ability to pay). A contract such as this eliminates the efficiency incentives for the private sector which are the cornerstone of private sector participation. This can result in a higher cost of electricity for the consumer, even if the price has decreased in the international markets. Situations of this nature may cause a reversal in the process of private participation.

As another example, let us assume that the government offers an exchange rate guarantee on the funds for a road concession. If the construction of the road is financed with local currency, the project will not be exposed to an exchange rate risk because the tolls and financial expenses will also be denominated in local currency. If the project is financed with foreign currency, there will be an exchange rate risk. In the absence of a prior exchange rate guarantee, the concessionaire will explore the possibilities of raising capital in the domestic market. In most countries this market offers at least partial financing. Exchange rate guarantees discourage the search for local financing, thus making the exchange rate risk of the project higher than in the no-guarantee scenario, even though the risk is borne by the public sector instead of the private sector.

Guarantees should be used judiciously to mitigate risks that the private sector is not genuinely able to absorb and avoiding the elimination of efficiency incentives, the key of private sector participation. Whether they apply to exchange rate, volume of traffic or production purchases, guarantees that reach the extreme of becoming government policies will jeopardize the continuity of the private participation process when they are called upon.

The above examples show that mitigating the risk of one agent may increase the risks of the project as a whole, as well as the risks of reversing the process of private sector participation.

Conclusion

The participation of the private sector in the provision of infrastructure services has the potential of increasing the standard of living of the population. It stimulates supply and improves the quality of service. Moreover, it releases government funds for social programs, attracts private investment and reduces public spending. The extent to which these advantages are realized depends on the modalities employed for the incorporation of the private sector, the degree of its participation, the level of commitment from the parties and the efficiency and effectiveness in the management and administration of the whole process. However, this participation is fraught with risks due to the lack of experience--or recent experience--of the parties regarding these systems, as well as the complexity of the relationships among the parties. The ten commandments described above provide a framework for the application of economic and political considerations. They do not guarantee success, but compliance with them does minimize the risk of failure.

Table Nº2

TEN **COMMANDMENTS FOR SUSTAINABLE PRIVATE PARTICIPATION IN INFRASTRUCTURE**

1.Thou shalt obtain a commitment from the government and consensus among the political forces that make up a majority in Congress.

2.Thou shalt inform the public about the process, its advantages and its costs.

3.Thou shalt develop participation within a thorough and flexible legal framework, with clear and transparent rules of the game.

4.Thou shalt carry out the project awarding process with due diligence and select the most qualified group for construction, operation and financing.

5.Thou shalt appoint the best officers to the regulatory agencies, grant them independence from government and the private sector, and give them a capacity equivalent to that of the private sector.

6.Thou shalt commit the public and private sectors to the success of the operation.

7.Thou shalt not mix social and commercial goals.

8.Thou shalt distribute the cots and benefits with justice.

9.Thou shalt provide the private sector with the incentives necessary for its participation, but only those that are necessary.

10.Thou shalt not permit that the risk mitigation schemes of a project jeopardize the process of private sector participation.

[1] Chief of the Infrastructure and Financial Markets Division of the Inter-American Development Bank. The author thanks the pointed comments of Paulina Beato and Evamaría Uribe, but takes full responsibility for remaining mistakes of omission and commission. The opinions expressed in this paper are the author's and do not necessarily reflect the policies and procedures of the Inter-American Development Bank.

[2] The obstacles have been discussed in ***Roles of the Private Sector, Governments and Multilateral Creditors in Latin American Private Infrastructure***. Vives, Antonio and Chrisney, Martin. *Project Finance International: Americas Market Report*, Spring 1996.

[3] The consequences of the different modalities of participation have been discussed in ***Private Sector Participation in Infrastructure: Risk, Fiscal and Efficiency Issues in Public-Private Arrangements for the Provision of Services.*** Beato, Paulina and Vives, Antonio. *Infrastructure*, Vol. 1, Nº 3, Spring 1996, Wiley, New York,