

The Governance of Public– Private Partnerships

A Comparative Analysis

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Institutions for Development
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Abstract

There is growing interest in promoting public–private partnerships (PPPs) as an instrument to develop more and better infrastructure. Good governance for PPPs is a key aspect of promoting appropriate projects and avoiding policy errors and associated fiscal costs. This paper defines good PPP governance and analyzes the functional organization of the PPP project cycle in Latin American and Caribbean countries from a comparative perspective, identifying two stylized governance models. Centralized models are common in more unitary states and are characterized by the central role played by a designated PPP unit, while decentralized models are more typical in federal or decentralized countries and depend more intensively on line ministries and public developments banks. We also identify the main incentives and conflicts of interest inherent in each governance model, and the organizational devices to mitigate them. Finally, we conclude with some general principles for good governance.

JEL Codes: D02, G23, G28

Keywords: governance, public–private partnership, risk assessment, institutions, value for money

Acronyms

ANADIE	National Alliance for the Development of Economic Infrastructure, Guatemala (Agencia Nacional de Alianzas para el Desarrollo de Infraestructura Económica)
CBA	Cost–benefit analysis
GDP	Gross domestic product
IDB	Inter-American Development Bank
LAC	Latin America and the Caribbean
MEF	Ministry of Economy and Finance
MOFP	Ministry of Finance and the Public Service, Jamaica
OECD	Organisation of Economic Co-operation and Development
PPP	Public–private partnership
PROESA	Export and Investment Promotion Organization of El Salvador
ProInversión	Private Investment Promotion Agency, Peru (Agencia de Promoción de la Inversión Privada)
SHCP	Secretariat of Finance and Public Credit, Mexico (Secretaría de Hacienda y Crédito Público)
TPP	Traditional public procurement
VfM	Value for money

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1. Introduction

Infrastructure investment is a fundamental component of development. Investment in energy, communication, transportation, and basic sanitation facilities and networks is vital for economic and social wellbeing and supports the creation of other business and investment opportunities. There is a pressing need for infrastructure in Latin America and the Caribbean (LAC). According to various estimates, closing the infrastructure gap between LAC countries and developed countries requires the former to invest 5 percent of its gross domestic product (GDP) in the sector over an extended period of time. This would require an additional US\$120 billion to US\$150 billion per year on top of what LAC countries have been investing, which is between 2 and 2.5 percent of GDP in recent years (Serebrisky, Suárez-Alemán, Margot, et al., 2015).

Increasing private investment is key to reaching this goal. For example, in an optimistic scenario, assuming public investment would reach 2 percent of GDP, private investment would have to triple (to 3 percent of GDP from 1 percent in recent years). Private investment in public–private partnerships is not a recent phenomenon in the LAC region, which has been leading the developing world in private investment in infrastructure. Between 1990 and 2013, private investment in LAC was nearly 30 percent more than in the rapidly growing Asian economies (US\$503 billion). Nevertheless, maintaining and increasing private financing will require supply- and demand-side changes. On the supply side, institutional investors should develop strategies to progressively include infrastructure as a new asset class with an attractive risk–return profile in their investment portfolios. On the demand side, LAC countries need to develop the regulatory and institutional capacities required to promote and structure robust PPP projects that are credible and attractive to a wide range of investors. In this regard, a successful institutional framework for PPPs tends to emphasize standardization of processes, clear legal standards, and sound fiscal management. PPP investment should be aligned with the government’s medium- to long-term investment strategy and fiscal planning, and PPP laws should be consistent with other sector laws and government policies that can affect PPP projects to avoid uncertainties about the legal framework (Reyes-Tagle, 2018).

PPPs can have many modalities, and the most common type is long-term contracts in which the private sector finances, builds, and/or maintains the infrastructure, and absorbs the risks associated with the availability of and/or demands for the infrastructure. PPPs not only attract private capital but, most importantly, also have the comparative advantage of improving design efficiency, enhancing service quality, and reducing total costs and delays in a project due to synergies between construction and maintenance (IMF, 2014).

The governance of PPPs consists of three fundamental levels. First, the *macro* level consists of the laws regulating the procedures for PPP design, implementation, monitoring, and dispute resolution (the PPP project cycle), as well as the responsibilities and roles of the various entities involved in each phase of the project cycle, among other elements. Second, the *meso* level consists of those entities that perform the functions required in the PPP project cycles. As discussed below, the entities (e.g., ministries, divisions, and subnational governments) responsible for performing the various functions required in PPP project

cycles vary by country. Third, the *micro* level consists of PPP contracts between a private stakeholder and the state, and the contractual structure that governs the PPP (e.g., loan, construction, service, financing, or insurance contracts). There are important interactions among the three levels. For example, a PPP project does not end when the contract is granted, as the project requires the intervention of regulators or contract supervisors at various points, such as tariff regulation, review of the service level agreement, or contract renegotiation, which can be regulated from within or outside of the contract.

Good PPP governance can be defined from a normative and a negative perspective. From a normative perspective, good PPP governance should promote PPP projects with appropriate risk allocations. In other words, the contractual party with the best capacity to manage it should retain each risk, and exogenous risks should be absorbed by the party best suited to control them (Irwin, 2007). From a negative perspective, PPP governance should avoid two types of errors. On one hand, there is the error of not financing PPP projects due to limited technical capacities of the government for promoting and structuring such projects. On the other, there is the error of carrying out PPP projects that should not have been done at all or should have relied on traditional public procurement (TPP) and financing.

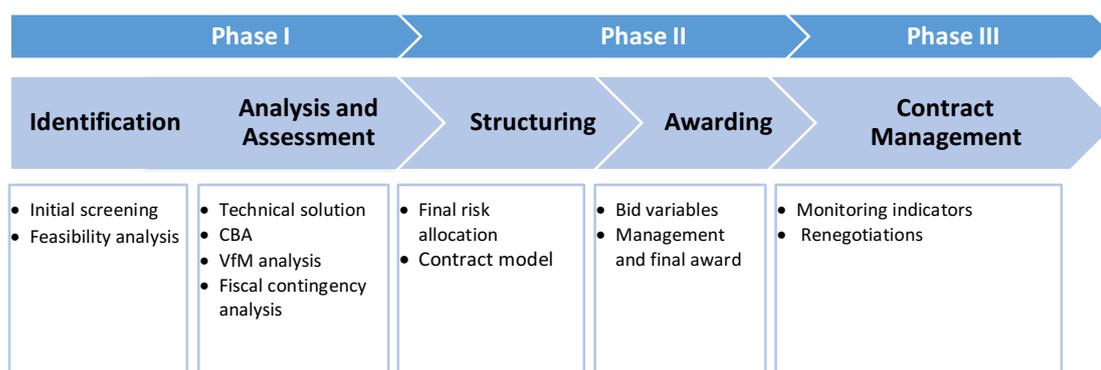
This paper focuses on analyzing the institutional and regulatory frameworks that support private investment in infrastructure through PPPs. In other words, through investment schemes in which the private sector provides the infrastructure traditionally supplied by the state. It contributes to the comparative analysis of PPP governance and thus complements more quantitative studies, such as those conducted by the Economist Intelligence Unit (e.g., EIU, 2017). These works, as well as the normative research conducted by organizations such as the OECD (2012), focus on the general principles that PPP frameworks should follow and do not provide a comprehensive and comparative assessment of the PPP process, the stakeholders, or the interactions among them. In particular, previous works do not relate PPP governance to the institutional context of a country. At the same time, this paper also takes a big picture perspective of the PPP process and all the stakeholders involved, in contrast to the studies that focus exclusively on the PPP units (OECD, 2010). Furthermore, this is the first comparative analysis of the PPP governance structure based on the LAC experience and can therefore contribute significantly to understanding the modalities of PPP governance structure and ways these modalities can be improved to enhance the functioning of PPPs in the region.

The paper is organized as follows: Section 2 describes the PPP functional organization, highlighting its main institutions and actors. Section 3 defines good PPP governance and examines the ways in which it could impact the incentives for the main PPP actors. Section 4 presents two basic stylized PPP governance models. Section 5 discusses the organizational structure and incentives of PPP units and shows some common trends, particularly the increasing importance of the risk assessment conducted by finance ministries and the bigger role played by monitoring and supervision institutions. Section 6 focuses on analyzing the main conflicts of interest of each governance model and the institutional devices put in place by LAC countries to mitigate them. Finally, section 7 concludes, highlighting a few principles that are key to good PPP governance.

2. The Functional Organization of PPP Project Cycles

On a conceptual level, and in a simplified manner, the life cycle of a PPP project consists of three basic phases (Figure 1). Each phase requires the performance of certain functions in the process of PPP design and implementation, which can be carried out by government entities or other organizations. The following presents a basic overview of the functions and the entities/organizations responsible for carrying out these functions.

Figure 1. Phases and Functions of a PPP Project Cycle



Source: Author's elaboration.

Phase I: The **pre-tender phase** consists of identifying, analyzing, and assessing the project. The main goal of this phase is to decide whether to carry out a project through a PPP and, if necessary, to prioritize among the various PPPs in the pipeline. This decision-making process involves several steps. The first step consists of identifying projects, which requires an initial screening of potential projects and a prefeasibility study to gauge their technical and economic viability. This analysis determines which projects merit further consideration based on public interest and on consistency with the national economic and social infrastructure development plan or strategy. This step is usually conducted by the procurement units, which are primarily government ministries, particularly ministries of transport and public works. However, increasingly, this step is being completed by other ministries wishing to finance their civic works or services (e.g., prisons and stadiums) through PPPs. While some countries put their development banks in charge of promoting PPP projects, others (e.g., Guatemala and Honduras) have set up PPP promotion agencies to identify projects and potential stakeholders.

After having determined the interest in as well as the technical and legal feasibility of a certain PPP project, a more in-depth study is conducted, which consists of the following basic components:

- The **value for money (VfM) analysis** quantifies the public-sector gains from implementing an infrastructure or service project through a PPP.¹ The VfM compares the

¹ Simply put, VfM can be defined as the difference between: (i) the present value of the total net cost of a project through public provision after adjusting for risks and third-party incomes and (ii) the total cost of the project through a PPP based on the present value of cash flows from the government to the contractor, the costs of managing the PPP contract, the costs of the retained risks of the project, and the efficiency gains.

cost of constructing an infrastructure project using TPP with the cost of developing the same project as a PPP. In so doing, as explained in further detail in the next section, it analyzes the risks retained and transferred by the public sector in order to choose the option with the best VfM for the public sector. Additionally, the VfM analysis includes qualitative criteria, which enable policymakers to prioritize between the different alternatives. PPP units, which are specialized entities within government agencies that support the development of PPPs, can conduct this analysis. Ministries of finance usually conduct the final validation of a VfM analysis. As assessed below, PPP units can play different roles in the project cycle and be part of different government entities.

- **Socioeconomic cost–benefit analysis (CBA)** complements VfM analysis and helps determine the public interest or the socioeconomic contribution to the country beyond the appropriateness of conducting the project through TPP or a PPP. The CBA is key to avoiding projects with negative social utility that would be a burden to society in the medium to long term even if they generate positive economic impact in the short term. Line ministries usually conduct this analysis.
- **Fiscal contingency analysis** consists of valuing the fiscal contingencies of the PPPs. It is key to determining the fiscal valuation of retained and transferred risk of a given project, and hence, the final VfM. This analysis also examines compliance with spending limits on PPPs, if required by fiscal responsibility laws or PPP regulations. This analysis is also essential to determine the cost and best use of certain public instruments to mitigate the government’s risk, particularly government guarantees. Ministries of finance traditionally carry out this analysis, and some countries have recently set up divisions or specialized units to measure the fiscal contingencies of PPP projects.

Phase II: The **structuring and tendering phase** focuses on project structuring and procurement. This phase consists of defining the final risk allocation (based on the VfM analysis) and awarding the contract. The VfM analysis is essential, as it determines whether it is appropriate to carry out a given project through a PPP, and if so, which risks are ultimately retained or transferred. Nevertheless, the veto powers of other government entities (especially the ministry of finance) that must approve the final contract structure of the PPP greatly affect this decision. Logically, the decision regarding risk retention and transfer can affect the VfM analysis, which should be updated to ensure that the project is more efficiently carried out through a PPP than through TPP based on the final risk allocation. Once the risks have been allocated, the contract is drafted and put out to bid. The entities that run and participate most actively in this process are the line ministries, their procurement units, and their legal departments. PPP units provide information and technical assistance, even though they do not usually play a decisive role in procurement. The risk units provide input into the fiscal implications involved, and grant the prior authorization required in the majority of countries to proceed with the procurement process.

Phase III: The **post-tender phase** concerns contract management. This phase is important because of its highly specific functions, such as contract audit, particularly tracking quality and performance indicators, and dealing with potential renegotiations. Organizational support of this phase usually comes from the line ministries, which provide their respective

technical teams, risk units, and PPP units. For example, Honduras has recently established an ad hoc agency to supervise PPP contracts.

The above diagram is an illustration of a simplified project cycle to show its functional organization. Specifically, technical preparation of the project has been grossly simplified in terms of the time required and the need for the component, which entails extensive engineering efforts and is provided by the corresponding ministry, although it can also be outsourced to companies, such as *Estruturadora Brasileira de Projetos* in Brazil.² PPP projects are highly complex because of the coordination required among the units with different technical capacities distributed among various government entities. The following section discusses the various roles and incentives played by participants of institutional PPP arrangements.

3. Defining Good Governance in Public–Private Partnerships

PPP governance consist of rules and procedures that define the incentives and restrictions guiding the strategies of the various stakeholders that participate in a PPP project cycle. These stakeholders are the organizations with decision-making capacity in the PPP project cycle or process, as defined in the legal framework. The main stakeholders are the PPP unit, the risk units situated within the ministries of finance, and the procurement units. The incentives and restrictions faced by stakeholders will affect the capacity of the country to promote PPP projects, the decision to carry out investment projects through PPPs or TPP, and the capacity to manage PPP project cycles. Thus, these incentives can affect both the quantity and quality of PPPs.

From a regulatory standpoint, good PPP governance can promote PPPs that create social value and generate positive VfM. Therefore, it is important to avoid two types of basic errors. First, carrying out a project when it should not have been carried out (Type I error). As shown in Table 1, this type of error occurs when (i) projects that should never have been happened are carried out (i.e., social inefficiencies arise due to the net negative social value of the projects, or white elephant projects) or (ii) projects that should have been done through TPP due to their negative VfM (which means that a PPP is a less desirable option than TPP) are carried out through PPPs, generating fiscal inefficiencies.

Second, some incentive schemes could lead to a failure in carrying out a PPP project when it is necessary (Type II error). As shown in Table 1, this type of error occurs when (i) projects with a positive social cost–benefit ratio are not carried out, resulting in social inefficiencies, or (ii) projects that should have been carried out through PPPs are implemented through TPP, which reduces risk-allocation efficiency and the VfM, generating fiscal inefficiencies.

² *Estruturadora Brasileira de Projetos S.A.* provides advisory services to federal, state, and local government bodies for bidding purposes in Brazil. Its activities include consulting on and coordinating technical, economic, and environmental feasibility studies for the viability of public infrastructure projects. The company was founded in 2008 and is based in Rio de Janeiro.

Table 1. Inefficiencies in the Decision to Proceed with a PPP

		Has public investment been carried out?		
		No	Yes, through TPP	Yes, through PPP
Should public investment be carried out?	No	Appropriate incentives	White elephants (NPV<0) Type I error	White elephants (NPV<0) Type I error
	Yes, through TPP	Social inefficiency (opportunity cost) Type II error	Appropriate incentives	Fiscal inefficiency (VfM<0) Type I error
	Yes, through PPP	Social inefficiency (opportunity cost) Type II error	Fiscal inefficiency (VfM<0) Type II error	Appropriate incentives

Source: Author's elaboration.

The difference between fiscal inefficiencies of projects that should have been carried out through TPP and vice versa is closely related to how transferred risk is measured in the VfM analysis, and specifically to the estimates and management of those risks. When the bidding process is highly competitive, the VfM of a PPP is considered positive if the transferred risk (once the implicit and explicit public guarantees have been valued and deducted) plus the efficiencies generated by the private sector exceed the costs of contract management and supervision (see the annex for a simple analytical derivation of this result). Hence, an overly optimistic estimate of the transferred risk could result in a project carried out through a PPP when TPP is the more appropriate option. However, failing to consider the efficiencies generated by the private sector or overblowing the fiscal contingencies of a PPP project could result in overlooking the advantages of a PPP and promoting TPP when PPP is the more reasonable choice. It is therefore very important to have standardized procedures and adequate institutional coordination among the units responsible for analyzing the VfM of a PPP, the effectively transferred risks, and the fiscal contingencies. There should be an appropriate balance between the incentives to promote PPPs and TPP. As demonstrated later herein, different institutional frameworks can lead to different incentives for stakeholders.

4. PPP Governance Models

There are many ways to structure institutional support for PPP project cycles. As mentioned above, governance models operate on various institutional levels. The first level consists of the basic legal framework of PPPs, while the level includes the units or entities responsible for implementing PPPs. The scope of the roles of these units and entities and their locations within the public sector vary by country. The analysis presented below describes the regulatory framework for PPPs in LAC, presents a comparative analysis of the role of the main public stakeholder in a PPP process, and presents two stylized governance models developed by LAC countries to coordinate the main organizations involved in PPP projects (PPP units, ministries of finance, procurement ministries or units, public banks, or development banks). These models are the centralized model, in which PPP units play a

decisive role throughout the project cycle, and the decentralized model, in which projects are developed and structured by a wider range of government entities.

4.1 Regulatory Framework for PPPs in LAC

At a macro level, the governance of PPPs consists primarily of the framework that is usually established by a PPP or a Concessions law. Through PPP laws, the state grants the private sector the capacity to provide and finance public infrastructure, thus putting an end to its monopoly in building public infrastructure. The state also defines the principles and procedures of PPPs, as well as the entities responsible for their implementation. Even though not all countries require a law to grant the private sector the capacity to invest in projects and services traditionally provided by the state, it is the norm in most LAC countries—especially those more experienced with PPPs—as shown in Table 2. Due to issues such as credibility, clarity, and transparency, it is advisable to have an explicit regulatory framework for PPPs, especially when PPPs are widely implemented.

The framework regulations should be compatible with the legal and administrative culture of each country and should draw from best practices such as those featured in the analyses of UNCITRAL (2001) or OECD (2010). These include: (i) transparency of the process; (ii) financial, fiscal, and environmental sustainability of the projects; (iii) equitable process and promotion of competition; and (iv) legal consistency across the regulated sectors involved in the PPP framework. The legal framework governing explicit interventions by the public sector should consider the capacity of the public sector to support PPPs through direct financing (availability payments), other financial instruments (such as guarantees), or by other public-sector entities (such as development banks or guarantee funds). It is important to recognize the capacity for intervention of the public sector, as it is the foundation of the analysis of the risks and obligations undertaken by the public sector, of the appropriate quantification, record keeping, accounting, and reporting (IMF, 2005), and of the creation of units and divisions directly responsible for risk assessment and accounting that will play a key role in the process.

At the *macro* level, some countries require their legislative branch to approve PPP projects that require the government to provide funds or sovereign guarantees. This is the case in various Central American countries (El Salvador, Guatemala, and Honduras). The endorsement of the legislative branch enhances the credibility of the project, as it indicates a greater level of political consensus and could therefore mean lower risks of future regulatory changes, as well as greater knowledge and commitment to multi-year guarantees or obligations undertaken by the public sector. Nevertheless, it also reduces flexibility in the project, which already involves a long process, and introduces uncertainty about the outcome, which can decrease the interest of potential investors. Additionally, legislative processes may introduce changes toward the end of the structuring process of a PPP, which, combined with the uncertainty in the process and the additional risks, can hinder participation. As, in any event, the commitments undertaken by the government in a PPP project require annual approval of the legislative branch, likewise countries manage explicit and implicit fiscal risks in PPPs through other mechanisms that are apparently more

effective than ex post control by the legislative branch, such as limiting annual and cumulative costs of PPPs and analyzing the fiscal contingencies. In this sense, ministries of finance have veto power over the PPP process. This is discussed further below.

Table 2. Overview of Legislation and Institutional Framework of PPPs

Country	PPP law/policy	Requires approval by legislative branch for PPP	Dedicated PPP units
Argentina	Yes	No	No (in progress)
Bolivia	No	—*	NO
Brazil	Yes	No	Yes (PPP Management Committee)
Chile	Yes (Concession Law)	No	Yes (Public Works Concessions Coordination Unit)
Colombia	Yes	No	Yes
Costa Rica	Yes (Concession Law)	No	Yes
Dominican Republic	No	Yes	No
Ecuador	Yes	No (Approval by PPP Committee)	Yes (Inter-institutional Committee on PPP)
El Salvador	Yes	Yes	Yes (PROESA)
Guatemala	Yes	Yes	Yes (ANADIE)
Haiti	No (in progress)	—	Yes (Central Management Unit of PPPs)
Honduras	Yes	Yes	Yes (Commission for the Promotion of PPPs)
			Fiscal Contingencies Unit (MEF)
Jamaica	Yes (PPP Policy)	NO (Approval by the Ministerial Council and MOFP)	Yes (PPP, Privatization Unit, Development Bank of Jamaica)
Mexico	Yes	No (Investment Unit of SHCP and Inter-ministerial Commission of Public Expenditure, Financing, and Divestment)	No
Nicaragua	Yes	No	No
Panama	No	—	No
Paraguay	Yes	No (Approval by executive branch)	Yes
Peru	Yes	No (Approval by Private Investment Promotion Agency, contracting authority, and MEF)	Yes (ProInversión)
Trinidad and Tobago	Yes (PPP Policy)	No (Approval by the Ministerial Committee)	Yes
Uruguay	Yes	No	Yes (National Development Corporation)
			PPP Unit, MEF
Venezuela	No	—	No

Source: Author's elaboration.

* In the absence of a PPP law or policy, there is no law or policy that specifically requires PPP projects to obtain approval from the legislative branch. The Dominican Republic is an exception among the countries sampled here (EIU, 2017).

4.2 Public Stakeholders Involved in the PPP Process

There are three main public-sector entities responsible for designing, implementing, and monitoring PPPs:

1. The line ministries leading the project planning and procurement process (the procurement units).
2. The PPP units, particularly those dedicated to fostering and supporting the structuring of PPP project design and contracting.
3. The ministries of finance, which play a role in analyzing project risks, specifically measuring compliance with fiscal limits and fiscal contingencies.

Many other institutions play an increasingly important role. Among these are development banks, guarantee corporations, guarantee funds, and financing institutions for PPPs. These institutions facilitate funding and promoting projects and are playing an ever more important role in promoting PPPs. Additionally, sectoral regulatory authorities play a relevant role in project monitoring and in some cases in contract structuring and preparation. Below we compare the role of each stakeholder in the PPP process in LAC countries.

The line ministries involved in the PPP process are usually the procurement units willing to carry out a PPP project to implement their investment plans and fulfill their policy goals. This usually involves the ministries or procurement units dealing with infrastructure project procurement (e.g., the ministries of public works and transportation) or, more recently, the ministries of education and internal affairs or other ministries that are well-versed in public policy and have the technical knowhow to carry out the engineering. Nevertheless, many ministries lack the capacity to structure the legal and financial aspects of PPPs, thus PPP units emerge to provide technical support to the PPP process.

PPP units have been established in many countries to provide support to the PPP process as a whole and specifically to the procurement units. Many countries have incorporated PPP units in their governance model. For example, 17 of the 29 Organisation of Economic Co-operation and Development (OECD) member countries have PPP units, and 14 of the 21 LAC countries surveyed in this report also have them (Table 2). PPP units are created for various reasons, including strengthening technical capacities to promote and manage PPPs and enabling economies of scale and scope to enhance the understanding and management of PPP projects.

As shown in Table 3, the PPP units in LAC are part of the ministry of finance, the ministry of public works and transportation, or the development bank, or are configured as an independent unit attached to the office of the president. The scope of the functions of the PPP units vary widely from country to country and may include:

- promoting PPPs by fostering their use by the various procurement units and by attracting potential investors;
- providing policy and technical guidance by defining the processes, drafting management manuals, and providing technical support to the processes by measuring their economic value and structuring the risks appropriately;
- developing the technical design of the PPP projects;

- managing and giving the final approval for a PPP project after reviewing the supporting documents and the technical studies that underpin the decision to finance a project through a PPP;
- defining the contractual and financial structure of the project; and
- tracking and monitoring the contract.

The next section addresses how the convergence of a few or many of these functions in an institution can create different incentives to appropriately select and implement projects.

Risk units in the ministries evaluate the fiscal risks in the project structuring. They have been playing an increasingly prominent role as the number of PPPs has grown, accumulating more explicit and implicit risks. The emergence of PPP risk units has also been linked to growing concern about measuring contingent liabilities as a whole. In other words, assessing liabilities beyond those strictly associated with the PPPs, such as the cost of litigation, government guarantees, natural disasters, and financial crises. Even though risk units, which are responsible for measuring and evaluating risk, have different institutional frameworks, they have come to play a strategic role in PPP structuring in LAC countries.

As shown in Table 4, ministries of finance in LAC organize their risk units differently. Some fall under the treasury division (e.g., Colombia), others under the public investment division (i.e., Paraguay) or the budget division (e.g., Chile), while others are constituted as an ad hoc risk division (e.g., Panama). Countries such as Panama have opted for the ad hoc option because their role entails taking into consideration a broader range of explicit and implicit contingency risks. This arrangement enables economies of scale in identifying, measuring, managing, and monitoring contingency risks due to the similarities in the risk evaluation methodologies. On the other hand, having the public investment division in charge of the contingency risk assessment of PPPs also has advantages, such as better use of the in-house economic analysis capacity for investment projects, as well as potential linkage with the National Public Investment System (*Sistema Nacional de Inversión Pública*).

Additionally, the functions of the risk units can vary and may encompass different phases of the PPP project cycle. Some risk units are involved in almost all project phases (e.g., Jamaica, Peru, and Uruguay), including supervising and monitoring PPP contracts, while others play a more specific role based on technical validation in the risk structuring phase (e.g., Costa Rica).

Table 3. PPP Units in Latin America and the Caribbean

Country	Name of Unit	Administered by	Planning	Promoting	Designing (technical and economic)	Gatekeeping	Evaluating Fiscal Risk	Structuring Contracts	Monitoring Contracts
Brazil	Investment Partnership Program (<i>Programa de Parceria de Investimentos</i>)	Presidency of the Republic	Yes	Yes	No	Yes	No	No	No
	PPP Management Committee/PPP Unit	Ministry of Planning, Budget and Management; with participation of the Ministry of Finance and the Presidency	No	No	No	Yes	No	No	No
Chile	Concession Board	Ministry of Public Works	Yes	No	No	Yes	No	No	No
	Public Works Concessions Coordination Unit	Public Works Division, Ministry of Public Works	No	Yes	Yes	Yes	Yes	Yes	Yes
Colombia	PPP Unit	National Planning Department, Presidency of the Republic	Yes	No	No	Yes	No	No	No
Costa Rica	National Concessions Council	Ministry of Public Works and Transportation	No	No	Yes	Yes	Yes	Yes	Yes
Ecuador	Inter-institutional Committee on PPP	Presidency of the Republic	Yes	Yes	No	No	No	No	No
El Salvador	Exports and Investment Promotion Agency of El Salvador (PROESA)	Presidency of the Republic	Yes	Yes	No	Yes	No	No	No
Guatemala	National Alliance for the Development of Economic Infrastructure (ANADIE)	Presidency of the Republic	Yes	Yes	Yes	Yes	No	Yes	Yes
Haiti	Central Management Unit of PPPs	MEF	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Honduras	Commission for the Promotion of Public-Private Partnership	Presidency of the Republic	Yes	Yes	Yes	Yes	No	Yes	Yes
Jamaica	PPP Unit	Development Bank of Jamaica	No	Yes	Yes	No	No	Yes	Yes
Uruguay	National Development Corporation	Public corporation	Yes	Yes	Yes	No	No	No	No
Trinidad and Tobago	PPP Unit	Ministry of Finance	Yes	Yes	Yes	No	No	No	No

Source: Author's elaboration.

Table 4. Participation of Risk Units in Each Project Phase

Country	Name of unit	Administered by	Technical support	Gatekeeping	Contract structuring	Monitoring of fiscal contingencies of the contract
Chile	Contingent Liabilities and Concessions Unit	Budget Office, Ministry of Finance	No	Yes	Yes	No
Colombia	Sub-division of Risk	Treasury Division, Ministry of Finance	No	Yes	Yes	Yes
Costa Rica	PPP Unit	Treasury Division, Ministry of Finance	Yes	No	No	Yes
El Salvador	Investment and Treasury Division (DGICP)	Ministry of Finance	Yes	Yes	Yes	Yes
Guatemala	Fiscal Evaluation Division	Ministry of Public Finance	Yes	Yes	No	Yes
Honduras	Fiscal Contingency Unit	Secretariat of Finance	Yes	Yes	Yes	Yes
Jamaica	Department of PPP	Public Corporation Division, Ministry of Finance and Planning	Yes	Yes	Yes	Yes
Uruguay	PPP Projects Unit	Ministry of Economy and Finance	No	Yes	Yes	Yes
Peru	Department of PPP	Office of the National Public Investment System. Ministry of Economy and Finance	No	Yes	Yes	Yes
Paraguay	PPP Unit	Office of the National Public Investment System, Ministry of Finance	No	Yes	Yes	No
Mexico	Investment Unit	Ministry of Treasury and Finance	Yes	Yes	No	No

Source: Author's elaboration.

Table 5. Stakeholder Leadership in Each Phase of PPP Project

Country	Planning	Promotion	Project design	Fiscal Risk assessment	Structuring	Contract preparation	Approval and award	Contract monitoring
Brazil	PPP unit (Presidency)	PU	PU	RU	PU	PU	PU	PU
Chile	PPP unit	PU	PPP unit	RU	PPP unit	PPP unit	PPP unit / UR	PU/PPP unit
Colombia	PPP unit	PU	PU	RU	PU	PU	PU	PU / RU
Costa Rica	PU	PU / PPP unit	PU	RU	PU / PPP unit *	PU / PPP unit *	PU / PPP unit *	PU / PPP unit
El Salvador	PU / PPP unit	PPP unit	PU / PPP unit	RU	PU / PPP unit	PU / PPP unit	PU / PPP unit	PU / SSAPP
Guatemala	PU / PPP unit	PPP unit	PU / PPP unit	RU	PU / PPP unit *	PU / PPP unit *	PU / PPP unit *	PU / PPP unit
Honduras	PU / PPP unit	PU / PPP unit	PU / PPP unit	RU	PPP unit	PPP unit	PPP unit	SSAPP
Jamaica	PU	DB - PPP unit	PU / DB-PPP unit	RU	DB - PPP unit	DB - PPP unit	MEF	PU
Uruguay	PU / PPP unit / RU	PPP unit	HU / RU	RU	PU / PPP unit *	PU / PPP unit *	PU / PPP unit *	PU / RU
Peru	PU	PU	PU / PPP unit	RU	PU / PPP unit	PU / PPP unit	PU / PPP unit	PU
Paraguay	PU	PU	PPP unit	RU	PU	PU / PPP unit	PU / PPP unit	PU
Mexico	PU	DB	DB / PU	RU	PU	PU	PU	PU

Source: Author's elaboration.

Notes: DB = development bank. HU = hiring unit. PU = procurement unit. PPP unit = specialized PPP unit. RU = risk units of the ministries of finance. SSAPP = superintendence of PPP monitoring (Superintendencia de Seguimiento de APP). DB-PPP unit = PPP unit of development banks. MEF = ministry of economy and finance.

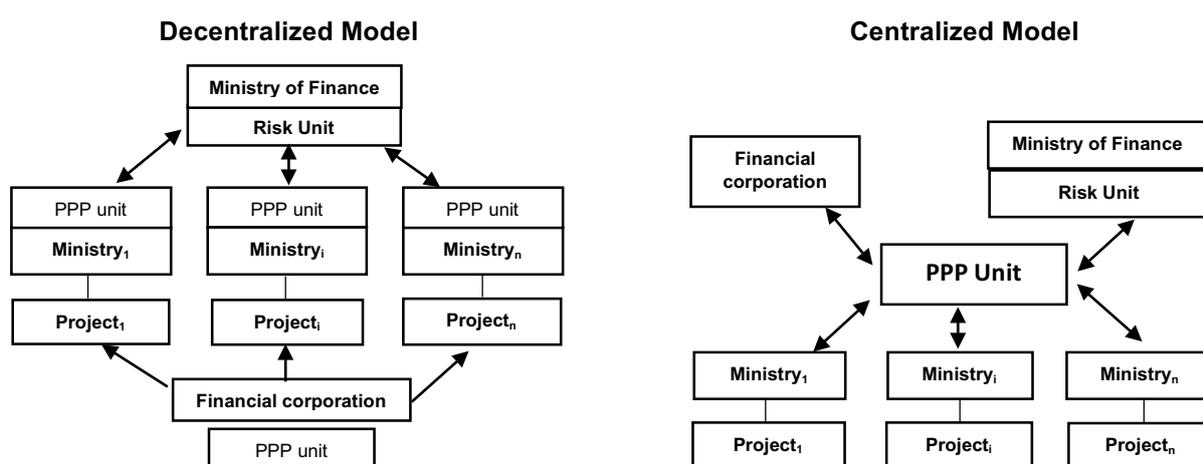
*As per agreement, PUs can delegate powers to or hire the PPP units.

4.3 Governance Models: Centralized and Decentralized

There are two basic models for PPP governance, especially for structuring the relationship between the PPP units, the line ministries that serve as planning and procurement units, the ministry of finance, and the development banks (Figure 2).

On one hand, in the centralized model, PPP units are the main entities responsible for PPPs throughout the project cycle. In this model, the PPP units validate and structure the PPP projects that have been promoted. Chile is a prime example of the centralized model. In Chile, the PPP unit (the Public Works Concessions Coordination Unit of the Ministry of Public Works) plays a decisive role throughout the project cycle, except for fiscal issues, which are overseen by the Contingent Liabilities and Concessions Unit of the Ministry of Finance. Countries with autonomous or independent PPP units, usually attached to the presidency, are the stylized version of this model. The centralized model takes advantage of economies of scale in providing technical support through the PPP project cycle, particularly during project design and structuring, as it enables the procurement units of the various ministries to channel their projects through the same PPP unit. The PPP unit retains the technical capacity to structure the projects, analyzes the various risk management alternatives, and ensures that the initiative pursued has the best VfM. PPP units in countries like Chile fall under their ministries of public works, possibly due to the great significance of transport PPPs in volume and historically. This model offers advantages, such as a higher degree of functional specialization in terms of project structuring and economies of scale. However, it also has drawbacks, as it reduces incentives for other ministries to promote projects and could lead to bias within the ministry of public works. Therefore, in many countries, the PPP units highly skilled in promoting and structuring projects are attached to the presidency and provide support to all procurement units.

Figure 2. PPP Governance Models



Source: Author's elaboration.

On the other hand, in more decentralized models, PPP projects are developed and structured by a wider range of government entities (banks and development corporations

usually play a bigger role). The procurement units drive the process in the absence of the support of a dedicated PPP unit, either because there is no such entity or because the PPP unit focuses more on planning and providing technical guidance and less on supporting project management and development. Countries such as Brazil and Mexico have adopted more open models in which procurement authorities are the main entities responsible for promoting and structuring PPPs without receiving specialized technical support from a centralized PPP unit. Hence a wide range of ministries (and subnational governments) can structure the projects. They can decide to create a unit or division dedicated to PPPs within these ministries or outsource most of these functions. In these cases, the risk unit of the ministry of finance usually gains more prominence and becomes more involved in the various phases of the PPP cycle (e.g., Uruguay). In decentralized models, procurement units take a more flexible and proactive approach to promoting and structuring projects and to ensuring their alignment with the investment plans of each ministry. For this model, it is particularly important to have sufficiently robust supervision and contingency analysis (often with strict fiscal limits on annual budgets and on cumulative PPP budgets). Risk units may play a greater role since PPP project design is dispersed among different government branches and thus it becomes more important to guarantee fiscal compliance and fiscal risk assessment. In this model, it is more common for the countries without an ad hoc or centralized PPP unit to establish units in public development banks to promote and structure projects (such as the PPP unit within the Development Bank of Jamaica) or to set up funds or corporations with the mandate to promote and structure PPPs, such as the National Infrastructure Fund (*Fondo Nacional de Infraestructura*) of Mexico, or the National Development Financial Institution (*Financiera de Desarrollo Nacional*) of Colombia. Additionally, the ministries with the capacity to analyze the most technical aspects of the project are those that generate the key parameters to calculate the VfM of a PPP, such as synergies between the construction and operational phases.

On a macro-institutional level, decentralized PPP governance models are more common in federal or more decentralized political systems in which subnational governments have more responsibilities (e.g., Brazil, Mexico, and Colombia). These systems call for more flexible and autonomous procurement units, as there can be high costs associated with coordinating multiple entities. Nevertheless, centralized models are more commonly adopted in unitary states (e.g., Chile and Peru) or small countries (e.g., those of Central America). In this model, a central PPP unit centrally promotes and structures projects. Centralization takes greater advantage of specialization without bearing the prohibitive costs of coordination. Therefore, each PPP governance system has its own logic and operates on a given macro-institutional level. The virtue of PPP governance is largely determined by its capacity to promote PPP projects without compromising quality. This mainly depends on its ability to align the incentives of each stakeholder involved.

5. Organizational Structure and Incentives of PPP Units

Could incentives in PPP governance lead to distortions in public policy? To shed some light on this question, we focus on the potential conflicts of interest between PPP functions faced

by PPP units. We begin by analyzing how PPP governance affects the incentives for the various participating stakeholders, considering broader aspects of the macro-institutional (e.g., the functioning of public administration and the judicial system) and micro-institutional (the organizational structure and the functions of each of the stakeholders) frameworks. Given the heterogeneity among the types of PPP governance, we focus mainly on the organizations discussed previously, that is, PPP and risk units.

5.1 Incentives and the Functional Organization of the PPP Cycle

The mere existence of a PPP unit introduces a change, as it implies the willingness to promote or better serve the needs of PPP projects. This does not mean that countries without PPP units have not carried out PPP projects, as several member countries of the OECD (e.g., Spain and France) do not have dedicated units and instead manage PPP projects through their ministries or public corporations. The existence of a PPP unit can promote the implementation of more PPPs simply because such a unit reflects the intention to promote or structure PPPs. In principle, these incentives are neither positive nor negative per se. The functioning of a PPP unit is what really matters and this depends largely on the organizational structure of the unit. Among the elements of this structure that could create incentives for PPPs are those related to the scope of functions, the degree of autonomy, their reporting line, and the mode of financing. These characteristics can be interconnected, since PPP units without organizational autonomy normally lack their own sources of financing.

First, the scope of functions of PPP units can result in conflicts of interest when the different functions create opposing incentives. The following are among these functions.

Promoting, designing, and evaluating projects. If the same PPP unit promotes, designs, and evaluates the projects, it may have an incentive to positively evaluate the projects it has promoted. This is especially the case when a PPP unit's financing depends on the projects promoted and implemented. In this respect, the function of validating the VfM analysis of a PPP project should be isolated from the incentives to promote and design the project and should comply with the most rigorous technical criteria and procedures. With that in mind, the risk units also have a fundamental role to play by validating that the risk transfers conducted in the VfM analyses have been properly computed, or in other words, that the analyses have correctly accounted for the contingent liabilities retained by the government.

Structuring and monitoring contracts. If a PPP unit oversees contract management (e.g., tracking indicators of service quality or providing assistance in potential renegotiations) and the structuring of the PPP (which determines the indicators of service quality and the risks undertaken by the concessionaire, among other things), it might be less careful with contract design or hide mistakes that may have been made in previous phases of contract management. For this reason, it is becoming increasingly common for contract monitoring to be conducted by separate, ad hoc entities (e.g., the superintendencies responsible for contract monitoring in Honduras and El Salvador) or delegated to sectoral regulatory authorities (e.g., in Mexico and Peru). Meanwhile, public comptrollers have been

stepping up their participation, although they usually focus on ex post intervention, after monitoring has been completed by another entity.

Financing, promoting, or structuring a project. Incorporating PPP financing into its mandate can give a PPP unit greater incentive to implement projects. The fact that PPP units receive income (by collecting interest on the financing provided or “success fees” for projects promoted or implemented) can lead to distortions in its decision-making regarding whether to carry out PPP projects that may be more fiscally efficient through TPP.

Therefore, the different functions of a PPP unit may lead to conflicts of interest, which could offset the benefits derived from the economies of scale that could have arisen from centralizing multiple functions within the same PPP unit. Understandably, the more autonomy the PPP unit has in its decision-making and service provision, the more effective these incentives will be. Nevertheless, various stakeholders can compromise the incentives and the autonomy with veto power that can intervene in the project cycle of a PPP. In light of this, the role of the risk units is key to this process. The greater number of organizations with veto power or authority of approval, the more difficult and time-consuming the approval will be. At the same time, this means more guarantees, since a broader range of interests and perspectives have been taken into consideration.

Finally, the institutional location of a PPP unit within a sectoral ministry can facilitate its alignment with the governance plan or action regarding the public investment proposal, as well as with the technical knowhow of the ministry staff. The PPP unit usually falls under the ministry of public works (e.g., in Chile), the ministry of finance (in Uruguay and Peru), the presidency (in Guatemala), or a development bank (in Jamaica).³ When the PPP units have multiple functions (promoting, structuring, procuring, and/or following up on projects), there could be conflicts of interest among the functions, in which case it is essential to strike a balance in the process. In these cases, it is advisable to enhance coordination with the ministry of finance at various points in the project cycle to ensure that the possible conflicts of interest do not compromise the principles of a project’s VfM or affect its fiscal efficiency.

5.2 The Role of Risk Units in Managing Conflicts of Interest

Fiscal contingency analysis has become more important to PPP approval, partly due to concern about the improper or inefficient use of PPPs and the emergence of white elephants – infrastructure projects that have been carried out despite their negative socioeconomic value – leading to significant social and fiscal inefficiencies. For example, the United Kingdom’s PPP unit went from being an independent agency with a strong presence in the private sector to being an entity within the ministry of finance. As discussed previously, this new affiliation increases the importance of fiscal analysis in the process. Nevertheless, this

³These differences may be attributed to several factors. For example, in the first few cases, the PPP units were established within the ministries that had promoted the PPPs in their respective countries as well as in Latin America, such as Chile and Colombia. In these countries, the fact that PPPs fall under government ministries may be largely due to the need for close collaboration to develop a new procurement and financing mechanism, as well as institutional inertia. On the other hand, in countries that had PPP governance before the PPPs themselves came into being, the PPP units have generally been autonomous entities or are situated within the ministries of finance.

also has drawbacks, as it hinders a strategic view of infrastructure projects. These inefficiencies may have multiple causes, ranging from weaknesses in the VfM analysis to broader negligence in the CBA of the infrastructure projects themselves.

Ministries of finance may participate in several phases of the PPP design process. Even though these ministries do not traditionally intervene in promoting PPPs or in the initial prefeasibility studies, they play a bigger role in subsequent phases, especially project design and final structuring. In addition, these ministries are sometimes part of the procurement board (e.g., in Uruguay). The more important and rigorous fiscal analysis is in the PPP project approval process, the less likely it is that fiscal inefficiencies will arise, such as those resulting from implementing PPP projects that should have been carried out as TPP since accounting for fiscal contingencies would render the VfM negative. Lastly, risk units play an increasingly important role in monitoring and evaluating PPPs.

5.3 Entities Responsible for Monitoring and Evaluating PPPs

A known portion of the risk of PPPs appears in the implementation phase, where issues related to the financial assessment of the projects may emerge. The biggest and most common issue has to do with renegotiation. For example, Guasch (2004) analyzed concession contracts in Latin America and found that over 30 percent were renegotiated (55 percent in the transportation sector and 75 percent in the water and sanitation sector). Most of these renegotiations are resolved by tariffs (62 percent), while others are settled by extending the contract, reducing the investment, or increasing the state's contribution. Nevertheless, when the income generated is greater than expected, the private party usually pockets the difference. Therefore, renegotiation makes concessions resemble sales in the sense that the concessionaires can have limited losses but unlimited gains.

Various entities could be responsible for overseeing PPP contracts, including the procurement ministry or unit, the PPP unit, the sectoral regulatory authority (e.g., for concessions in the telecommunications or energy sectors), an ad hoc agency (e.g., Honduras), or the comptroller general. In addition, an arbitration board and/or the judiciary can intervene in the event of a dispute. All of the above is stipulated in the contract, which defines the objective of supervision as well as the mechanisms and the authorities responsible for conducting it.

The role of the authorities depends on the scope of the provisions of the contract. Some PPP contracts have pre-established tariffs, service quality, or the obligation of interconnection, while others delegate these functions to the competent authority (i.e., the sectoral regulatory authority or the corresponding ministry). This type of contract is more flexible and requires transparent regulatory processes as well as strong institutions trusted by the private sector. The former type, by contrast, is less flexible and subject to less regulatory discretion. There are two variables that determine a project's type of contract. The first is the macro-institutional context along with the credibility and technical capacity of the institutions of a country, which determine the degree of flexibility of the contracts. The second is the type of project, which influences the type of contract chosen, and in turn, the supervision functions of the entities in charge.

The classification of the contract and its supervision are related to the characteristics of the project, including demand uncertainty or demand risk, the scale or size of the project, the technological complexity, or the sources of financing (share of cofinancing of the project). Many authors argue that variable-term contracts are more appropriate when demand uncertainty is high and generally beyond the control of the private entity; however, if the concession period is long enough, the project may be able to turn a profit even if demand is low.⁴ Meanwhile, in Peru, Ruiz Díaz (2015) found that the projects with higher demand risks, lower technological certainty, and less public financing are more likely to be carried out through more flexible contracts.

Regardless of the type of contract governance, monitoring is key to ensure the quality of maintenance and dealing with possible renegotiations. As discussed, there may be conflicts of interest between the tasks of supervision and the functions of promotion and evaluation, and the latter should be functionally and structurally separated from the former. However, since the knowledge of certain technical characteristics of contracts rests only with the procurement units or ministries, there is a need for proper coordination between these two types of tasks. Therefore, supervision can be carried out by ad hoc entities (e.g., as in Honduras) or by sectoral regulatory authorities that have not participated in the procurement process. This includes supervising the quality of construction and operation, ensuring contract compliance, and penalizing noncompliance throughout the project phases. The entity in charge of these tasks should also adhere to high standards of transparency.

In addition, contract monitoring includes dealing with possible renegotiations. Notably, the public and private sectors respond to renegotiation incentives that are of strategic concern to each party. The public sector could be interested in awarding projects to lowest-cost offers and pass on the increase in costs (through potential renegotiations) to future administrators. For its part, the private sector could be interested in bidding low (acting recklessly) to compete on price and win a contract with the intention of renegotiating later. Thus, the extent to which both parties have a converging interest in future renegotiations could determine the balance of interest between the parties. To avoid renegotiations that may arise because of this balance or in response to exogenous events unknown to the stakeholders involved, it is important to include an adequate analysis of fiscal risks and contingencies as well as a competitive and transparent awarding process with clearly defined risk-allocation criteria.⁵

Since renegotiation could entail economic and fiscal inefficiencies, the PPP should be carried out in the most cost-effective manner and through predictable and transparent mechanisms. From a regulatory standpoint, renegotiation should not increase the net present value of the project. In other words, it should not alter the outcome of the CBA. This means that the potential outcome of the renegotiation should be subject to the same

⁴ In these cases, the regulator sets the user tariffs (e.g., tolls) and the discount rate, and companies bid on the present value of earnings based on the pre-established user tariffs. The contract is awarded to the lowest price offer and is valid until the revenue collected by the private entity reaches the present value of earnings proposed.

⁵ For example, Engel, Fischer, Galetovic, et al. (2015) proposed a competitive selection process based on one bid variable instead of a weighted formula. This single variable is applied after a first round of selection conducted based on technical criteria establishing the appropriate quality standards.

analysis as in the original project. To make this happen, the entity responsible for conducting the project's CBA should participate in and validate the renegotiation.

6. PPP Governance Models and Conflicts of Interest

Each governance model described above responds to certain structural and institutional variables. The size of the economy and the organization of the state influence the costs and benefits of each governance model. In this section we argue that certain conflicts of interest emerge in different intensities according to the particular incentive structures under each governance model. In so doing, the section underlines the major risks in terms of conflicts of interest of each governance model and the institutional devices put in place by countries to mitigate them. It is in the latter sense that the importance of checks and balances emerges as a key aspect of both governance models but with different organizational forms. At the same time, we show that certain organizational particularities of each governance model can be seen as endogenous responses to their specific incentive problems.

As mentioned, centralized governance models are mainly characterized by the existence of a dedicated PPP unit that concentrates several functions of the PPP project cycle. In contrast, in decentralized models these functions are spread among a higher number of organizations (mainly line ministries and public development banks). The agglomeration of functions (and knowledge) in a designated PPP unit inherent to centralized governance models introduces several potential conflicts of interest. As PPP project promotion is perhaps the principal and distinctive function of designated PPP units, these models are more prone to the conflicts of interest between the functions of project promotion on one side and PPP contract structuring and monitoring on the other. Incentives to promote PPP projects may incline technical decisions in favor of PPPs either to justify and increase the promotion function or to obtain more structuring deals. Left unchecked, these incentives could be potentially harmful to an appropriate use of the PPP (Type I errors). However, countries with centralized governance structures mitigate this incentive problem through institutional checks to the power of PPP units in the form of risk units in the finance ministries with gatekeeping capabilities or, in a more extreme form, through legislative approval of PPP projects.

A second potential conflict of interest that arises from the agglomeration of knowledge and functions in designated PPP units inherent to centralized governance models is that between contract structuring and monitoring. If endowed with contract monitoring, a designated PPP unit could have weak incentives to raise concerns in the monitoring phase if they are related to pitfalls in the structuring of the projects. This could eventually lead to weaker project monitoring, which can undermine the PPP projects. To compensate for this, as mentioned in the previous section, in centralized governance models in some countries in Central America, new PPP supervisory agencies have been created with clear mandates regarding PPP project monitoring.

In contrast, in decentralized governance models, PPP promotion is more dispersed. Sectoral ministries and departments and, in certain cases, public development banks are responsible for promoting PPPs. Dispersion of PPP promotion responsibilities in several

ministries reduces their capacities in terms of PPP promotion due to a lack of agglomeration externalities that arises in more centralized governance models. This could lead, potentially, to a lack of PPP projects being developed (so called Type II errors) and a preference for TPP due to a lack of technical expertise. Building strong expert units within sectoral ministries is key, and many countries also delegate PPP promotion to public development banks. In these cases, a large role of public development banks in PPP promotion introduces a potential conflict of interest because these banks could be willing to support a PPP just because of their financial interest, not taking into consideration a robust CBA or VfM (Type I errors). In this setting, it is important that there are strong risk units in the ministry of finance to technically check PPP projects.

Because of all the above, each governance model is also, in part, an endogenous response to their particular main incentive problems, and not only to the structural and institutional factors highlighted above. The predominance of specific monitoring agencies or even legislative approval required in centralized models is in part a response to the relative importance of conflicts of interest between PPP promotion and PPP structuring and monitoring in this governance model. The importance of public development banks in PPP promotion and structuring in decentralized governance models is, in part, a response to the lack of expert capacity within dispersed sectoral ministries. A common denominator emerges in the importance of risk units in the ministries of finance as the cornerstone of adequate and independent project validation (economic analysis and VfM).

7. Conclusions and Good Governance Principles

PPP governance should promote PPPs as instruments to enhance the scope and efficiency of public investment by integrating the design, financing, construction, operation, and maintenance phases of an infrastructure project. Although the experience with PPP governance in LAC countries varies depending on the broader institutional characteristics and especially on the level of political and fiscal decentralization, it is possible to identify five basic trends that are fairly consolidated in these countries:

1. Functional specialization of the entities in the PPP project cycle.
2. Consolidation of the PPP units as key providers of technical support to project design and structuring, albeit with specific functions varying by country.
3. The growing importance of the units responsible for measuring PPP-related fiscal contingencies.
4. The role of development banks and other corporations in the PPP process, such as promoters or funders.
5. The emergence of entities that specialize in PPP monitoring.

These trends reflect four fundamental challenges in PPP governance, specifically in:

1. promoting PPP projects as a way to enhance the public-sector effort in building infrastructure;

2. preventing binding commitments entered into by different government entities with regards to costs and delivery dates without first conducting a technical risk assessment of the investment plan;
3. developing effective mechanisms to prioritize between projects based on their strategic significance for the country; and
4. obtaining appropriate information about projects to conduct an adequate evaluation to resolve the economic tensions and conflicts of interest that may arise during project implementation.

To a large extent, developed countries also share these challenges in PPP governance. For example, in the United Kingdom, the institutional arrangement and functions of its PPP unit (Infrastructure UK) have been changing in the past few years as a result of new challenges.⁶

Tackling these challenges requires developing a governance mechanism that integrates greater specialization (to carry out a wide variety of technical tasks related to PPPs) with economies of scale (to implement an ambitious infrastructure development program). As mentioned before, there are many governance models for PPP project cycles. These models do not operate in an institutional vacuum; rather, they largely reflect the institutional context of the country in which they are implemented. Nevertheless, it is possible to identify some appropriate principles for good PPP governance.

Adapting governance to the macro-institutional context of each country. The governance scheme must be compatible with the macro-institutional context of the country in terms of the level of decentralization, the quality of public administration, the existence of effective regulatory authorities and professional and well-capitalized development banks, and the independence and effectiveness of the judiciary. These defining characteristics should inform the choice of the PPP governance model. For example, in larger, federalist countries, PPP governance tends to be more decentralized to accommodate the greater capacity and autonomy of subnational governments. However, PPP contracts tend to be less flexible in countries where institutions are weak.

Separating key functions and clarifying function allocation. Allocating key functions among various entities is essential to improve the management of conflicts of interest and to facilitate the process's transparency and accountability. The following are among these functions:

- Promoting PPP projects and identifying interested investors.
- Carrying out the project's technical preparation and its structuring as a PPP.
- Conducting the CBA, the VfM analysis, and the contingency risk assessment to make the case for implementing the project through a PPP.
- Drafting the contract, running the bidding process, and awarding the project.
- Overseeing and following up on the project.

⁶ Please refer to the recent changes in the institutional arrangement and in the functions of Infrastructure UK outlined in the analysis by the National Audit Office, which points out the challenges in regulating long-term commitments and in prioritizing between and following up on projects (Dudman, 2016).

An entity in charge should participate in each of these phases, although there can be key teams (e.g., a legal or risk team) for overall monitoring and evaluation of the project.

Functional autonomy. The criteria for selecting the entities responsible for performing each function should be valid for each phase of the process, applied independently, and compliant with rigorous technical standards. There is another issue regarding whether all of the functions should be performed by the same unit that supports all the PPP projects across the country or the projects of various entities. The answer largely depends on the characteristics of the functions required. In principle, it seems natural that the functions specific to the type of project and to the sector (technical design, contract structuring, and monitoring) should be performed by various procurement units in accordance with their scope of action. On the other hand, the analyses of fiscal risks, fiscal contingencies, and VfM should be conducted by the same unit, as the same analysis methodology is required for all the projects. This can also allow greater distance from political, administrative, and business interests.

Checks and balances in the project cycle. Given the conflicts of interest that may arise in various phases of the process, there should be two agencies responsible for approvals related to PPP projects to prevent the same entity from moving ahead with the process without obtaining the approval of other entities in charge of other aspects of the project. Since there is tension between promoting as many projects as possible, doing them efficiently (by prioritizing strategic projects), and ensuring that only projects with positive VfM are carried out, it is necessary to have interactions between various entities with real veto power in different phases of the process, especially between the ministries of finance and line ministries, both of which are strategic stakeholders with veto power. The clearer the internal procedures and methodologies (which are the basis of decision-making by these entities), the easier it is to manage the checks and balances.

Centralized approach to strategic and supervision issues. PPP governance should adopt a centralized approach to strategic and supervision issues, which allows for appropriate prioritization between infrastructure projects based on objective and economic criteria. Further, a centralized approach highlights the overall risks and contingent liabilities undertaken by the national and subnational governments when they provide implicit and explicit guarantees to the projects. This approach is strategic and should be institutionally anchored close to the presidential level for issues of prioritization between investment projects and close to the ministries of finance for issues of risks and reporting. Additionally, monitoring should incorporate an overarching and strategic approach to all of the projects being implemented.

Participation of and coordination between all stakeholders. The orderly and formalized participation of all stakeholders is essential to gathering as much relevant information as possible throughout all phases of the project and reducing information asymmetries between the private and public sectors, as well as among the different public entities. Coordination between the various entities is also essential to leveraging the knowledge of different participants in each phase of the project cycle. In this regard, although they may have different organizational affiliations, the same people who

participated in project structuring should be in charge of monitoring, as they have the necessary background information and knowledge.

Transparency and accountability through adequate reporting on the projects and their contingencies. Transparency in each phase of the process is key to ensuring an open and competitive process that can win the trust of international investors. Information about the processes, projects, and their characteristics (including the contingencies) published on different platforms (e.g., databases, contracts, contingency reports, sanctions, and contract amendments) should be accessible through a well-designed website that ensures integrity in the public administration. In this regard, transparency is the first step toward accountability by each stakeholder to external parties (the private sector and the citizens) and internally to public-sector entities.

Integration of risk units in the monitoring and evaluation teams. The functions of monitoring and evaluation should be clearly assigned to a competent entity with the technical capacity to perform said functions. The PPP projects should be monitored and evaluated based on their economic and social returns to ensure that potential renegotiations do not affect the VfM proposed at the beginning of the project. In this regard, the risk units should be able to proactively participate in contract monitoring to ensure that changes in risk allocation do not affect the net present value of the project.

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Annex: Value for Money (VfM) and Fiscal Inefficiency

Whereas:

BC = Base cost

TR = Transferred risk

RR = Retained risk

TI = Third-party income

CA = Cost of contract administration

PC = Payment to contractor

GC = Gains in competitiveness

Then:

$$\text{Value for Money (VfM)} = \sum_{t=0}^n \frac{(BC_t - TI_t + RR_t + TR_t)}{(1+r)^t} - \sum_{t=0}^n \frac{(PC_t + CA_t + RR_t - GC_t)}{(1+r)^t}$$

Assuming:

BC - TI = PC

Then, for VfM > 0

TR + GC > CA

Therefore, for VfM to be positive, transferred risk and gains in competitiveness must be sufficiently high and the cost of contract administration as low as possible. The factors that reduce transferred risks or gains in competitiveness or the factors that increase the cost of contract administration work against the VfM. Therefore, failing to properly account for these factors could lead to decisions that generate inefficiencies in providing public infrastructure.