

# Partnerships for progress? Evaluating the environment for public-private partnerships in Latin America and the Caribbean

Findings and methodology

June 2009

Commissioned by







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# Preface

This paper describes a new benchmarking model and index that assesses the readiness of countries in Latin America and the Caribbean to participate in public-private partnerships in the infrastructure sector. The model was built by the Economist Intelligence Unit (EIU) and was supported financially by the Multilateral Investment Fund (MIF) and the Program to Promote Public-Private Partnerships in Latin America and the Caribbean funded by the government of Spain. The views and opinions expressed in this publication are those of the Economist Intelligence Unit and do not reflect the position of the Multilateral Investment Fund or the Program to Promote Public-Private Partnerships in Latin America and the Caribbean. The Economist Intelligence Unit's editorial team designed the project and constructed the model. Vanesa Sanchez was the editor and project manager. Eduardo Bitrán and Marcelo Villena were joint research managers.

For further information, please contact:

### **Economist Intelligence Unit**

#### **Country and Economic Research**

Vanesa Sanchez, project manager

[vanesasanchez@eiu.com](mailto:vanesasanchez@eiu.com) / +1 212 541 0569

### **Multilateral Investment Fund**

David Bloomgarden, project specialist

[davidb@iadb.org](mailto:davidb@iadb.org) / +1 202 942 8224



## Executive Summary

Governments worldwide have long partnered with the private sector to develop and maintain the roads, bridges, ports and water systems vital to economic growth. But structuring deals between the public and private sectors is complex and time-consuming, with financial and political risks for all sides. To understand the potential for these public-private partnerships (PPP) in Latin America and the Caribbean, the Multilateral Investment Fund (MIF) and the Program to Promote Public-Private Partnerships in Latin America and the Caribbean commissioned the Economist Intelligence Unit to measure the readiness of governments in the region to carry out such essential projects. The index and study that emerged from this research evaluated and ranked the legal, regulatory, institutional and financing environment for public-private infrastructure projects in 19 countries. Chile, one of the region's more developed economies, topped the index, thanks to strong regulatory and investment frameworks.

The index focuses on a country's readiness and capacity to carry out infrastructure projects using PPP models. By placing countries under a microscope for infrastructure project readiness, the "Infrascope" evaluates 1) a country's legal and regulatory framework for PPP projects; 2) the institutions that prepare, award and oversee projects; 3) the government's ability to uphold laws and regulations for concessions, as well as the number and success rate of past projects (that is, "operational maturity"); 4) the business, political and social environment for investment, and 5) the financial facilities for funding infrastructure.

The index measures countries on a scale of 0 to 100, where 100 represents the perfect environment for PPP projects. In this study, the term PPP refers specifically to projects where the government authorises operating authority to a private company. This includes concession contracts as well as greenfield projects (including joint ventures but excluding management, lease and affermage arrangements where the private sector does not finance project investment). No country achieved a perfect score for the Infrascope index. Chile scored 64.3 due to a high degree of project experience, low project-cancellation rates, and a reasonably developed legal, regulatory and institutional framework (albeit one of the best in the region). Attractive investment conditions and good facilities for project finance also helped boost Chile's score. The second and third-ranked countries, Peru and Brazil, exhibited similar characteristics.

Venezuela finished last in the Infrascope index, just after Nicaragua and Ecuador. All three countries, with scores ranging from 7 to 15, must improve the consistency and quality of their legal, regulatory and institutional frameworks to better facilitate concession projects. These countries also score in the bottom half of all countries for their investment and financial climates. The model assigns a heavy weight to legal and regulatory conditions, pulling down the aggregate score of any country that struggles in this area.



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The remaining countries in the index have scores between 20 and 30 points, with a few countries scoring in the 40s and 50s.

Especially for emerging markets, private-sector participation in infrastructure development has advantages over purely public initiatives. Private investors bring much-needed capital, often more than what governments could afford on their own. Private firms also bring new, efficient management practices that can improve the quality of services offered to the public. Outright divestiture or a simple management contract is the easiest way to involve the private sector, as risks and roles are clearly defined for each participant. Concession contracts and greenfield projects are a more complex but often-attractive alternative; concessions keep asset ownership in the hands of the state, place service-provision responsibilities in the hands of the private firm and give the private operator the rights to all future cash flows. As a result, stakes are high for both private and public partners. This places a premium on proper project design. Indeed, many promising concession projects have foundered because of perverse incentives, inadequate planning, faulty contracts and insufficient oversight.

Because concessions are more commonly used for transport and water sectors, the index and its corresponding country evaluations focus on these key sectors. Telecommunication and energy sectors, although occasionally privatised through concessions, are often fully divested. Thus, the index did not consider these sectors. Hospitals, prisons and school buildings are also constructed and operated through PPP models; however, due to data-availability constraints and the need to maintain a tight analytical scope for this pilot study, we have not analysed these projects in the Infrascopes index and study.

The Infrascopes is a pilot effort to evaluate a government's capacity to carry out concessions on a national and regional level. Index components seek to pinpoint the crucial aspects of the concession value chain, starting at project conception and spanning contract design, enforcement, supervision and termination. A few of the indicators used to generate the index are based on quantitative data; these have been drawn from international statistical sources. The others are qualitative in nature and have been produced by the Economist Intelligence Unit. The Economist Intelligence Unit bears responsibility for the Infrascopes and for this report. The findings and conclusions expressed here do not reflect the views or opinions of MIF or the Program to Promote Public-Private Partnerships in Latin America and the Caribbean, and no data have been sourced from either organisation.



# Scoring criteria

## The indicators

The Infrascopes index comprises 18 indicators, of which 13 are qualitative and five quantitative. Data for the quantitative indicators are drawn from international statistical sources for the latest available year. Gaps in the quantitative data have been filled by estimates.

The qualitative data have been drawn from a range of primary sources (legal texts, government web sites, interviews), secondary reports and data sources adjusted by the Economist Intelligence Unit. The main sources used in the model are the Economist Intelligence Unit, the World Bank, Transparency International and the Latinobarómetro survey.

The categories and their associated indicators are as follows:

### **1. Legal and regulatory framework (weighted 42%)**

- 1.1 Consistency and quality of PPP regulations
- 1.2 Effective PPP selection and decision-making
- 1.3 Fairness/openness of bids, contract changes
- 1.4 Dispute-resolution mechanisms

### **2. Institutional framework (weighted 25%)**

- 2.1 Quality of institutional design
- 2.2 PPP contract, hold-up and expropriation risk

### **3. Operational maturity (weighted 25%)**

- 3.1 Public capacity to plan and oversee PPPs
- 3.2 Methods and criteria for awarding projects
- 3.3 Regulators' risk-allocation record
- 3.4 Experience in transport and water concessions
- 3.5 Quality of transport and water concessions



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#### 4. Investment climate (weighted 4%)

- 4.1 Political distortion
- 4.2 Business environment
- 4.3 Social attitudes towards privatisation

#### 5. Financial facilities (weighted 4%)

- 5.1 Government payment risk
- 5.2 Capital market: private infrastructure finance
- 5.3 Marketable debt
- 5.4 Government support for low-income users

A detailed explanation of each indicator and scoring method is given in Appendix 2.



## Index results

### Overall score

Rank	Country	2009 score
1	Chile	64.3
2	Peru	58.9
3	Brazil	57.8
4	Mexico	47.5
5	Costa Rica	45.1
6	Colombia	39.1
7	Uruguay	27.3
8	Dominican Rep.	25.2
9	Jamaica	25.1
10	El Salvador	23.9
11	Honduras	23.7
12	Trinidad & Tobago	22.9
13	Paraguay	22.3
14	Argentina	21.9
15	Panama	21.0
16	Guatemala	18.0
17	Ecuador	14.5
18	Nicaragua	10.0
19	Venezuela	7.1





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#### Legal and regulatory framework

Rank	Country	2009 score
1	Peru	66.7
2	Chile	61.1
=3	Costa Rica	50.0
=3	Mexico	50.0
5	Brazil	47.2
6	Colombia	33.3
7	Argentina	27.8
=8	Jamaica	25.0
=8	Panama	25.0
=8	Paraguay	25.0
=8	Trinidad & Tobago	25.0
=8	Uruguay	25.0
13	El Salvador	19.4
=14	Dominican Rep.	16.7
=14	Guatemala	16.7
=14	Honduras	16.7
17	Venezuela	8.3
=18	Ecuador	5.6
=18	Nicaragua	5.6

#### Institutional framework

Rank	Country	2009 score
1	Brazil	62.5
=2	Chile	50.0
=2	Peru	50.0
=4	Colombia	37.5
=4	Honduras	37.5
=4	Jamaica	37.5
=4	Mexico	37.5
=4	Uruguay	37.5
=9	Costa Rica	25.0
=9	Dominican Rep.	25.0
=9	El Salvador	25.0
=9	Guatemala	25.0
=9	Paraguay	25.0
=9	Trinidad & Tobago	25.0
=15	Argentina	12.5
=15	Nicaragua	12.5
=15	Panama	12.5
=18	Ecuador	0.0
=18	Venezuela	0.0



### Operational maturity

Rank	Country	2009 score
1	Chile	73.9
2	Brazil	66.7
3	Costa Rica	55.0
4	Peru	53.0
5	Mexico	47.3
6	Colombia	44.7
7	Ecuador	39.4
8	Dominican Rep.	38.6
9	Honduras	21.3
10	El Salvador	20.8
11	Jamaica	17.0
12	Argentina	16.8
13	Uruguay	13.3
14	Panama	8.8
15	Guatemala	8.7
=16	Nicaragua	8.5
=16	Paraguay	8.5
18	Venezuela	4.8
19	Trinidad & Tobago	4.3

### Investment climate

Rank	Country	2009 score
1	Chile	93.0
2	Brazil	77.2
3	Uruguay	76.2
4	Peru	70.0
5	Mexico	65.1
6	Trinidad & Tobago	64.3
7	Panama	62.8
8	Costa Rica	61.3
9	Paraguay	59.4
10	Colombia	58.6
11	El Salvador	58.4
12	Nicaragua	53.7
13	Argentina	51.6
14	Honduras	39.8
15	Ecuador	38.4
16	Venezuela	37.1
17	Dominican Rep.	35.8
18	Guatemala	33.4
19	Jamaica	13.3



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#### Financial facilities

Rank	Country	2009 score
1	Chile	95.8
2	Mexico	66.7
=3	Brazil	62.5
=3	Panama	62.5
=5	Peru	58.3
=5	Trinidad & Tobago	58.3
7	Colombia	54.2
8	El Salvador	45.8
9	Costa Rica	41.7
10	Guatemala	29.2
=11	Paraguay	25.0
=11	Uruguay	25.0
=13	Argentina	20.8
=13	Dominican Rep.	20.8
=13	Venezuela	20.8
16	Ecuador	16.7
17	Jamaica	12.5
18	Honduras	8.3
19	Nicaragua	4.2



## Illustrative findings

### Legal and regulatory framework

Several key findings emerge from a close look at the region's legal and regulatory frameworks for PPP projects. First, not all countries have laws that explicitly allow or govern concession projects. For example, the legislature must approve each proposed concessions project, regardless of the sector, in the Dominican Republic, El Salvador, Guatemala, Honduras, Paraguay, and Trinidad and Tobago. For Colombia and Mexico, concessions or PPP schemes have been structured based on the country's law of public purchases. An integrated national legal framework does not exist, requiring project regulations to be established through low-level decrees and in each project contract. This leaves the concession scheme subject to continuous changes in its regulatory regime, and makes it more conditional on political considerations and current socio-economic contexts, greatly reducing the likelihood of a successful long-term outcome.

Second, the range of policy openness to concessions in the water and sanitation sector varies greatly by country. Indeed, the environment often can be quite restrictive. Countries such as Ecuador, Paraguay and Uruguay state explicitly in their constitutions and laws that water and sanitation services must be provided publicly, making any concession projects in this sector an exception rather than a rule. Legal and regulatory frameworks in these countries tend to be more open to road, port and airport concessions, however, as these sectors are less socially contentious. This difference between the water and transport sectors echoes a wider finding—that development of concession and privatisation frameworks in one sector does not necessarily transfer to other sectors within the same country.

A third clear trend is an inability to allocate appropriately the risk between public and private participants in concession contracts. This does not seem to depend upon the degree of political openness to privatisation in a specific sector. All countries in the region that have developed concessions in the transport sector have suffered excessive litigation and many post-contractual renegotiations, which have been based on financial-equilibrium principles and poor project preparation. Post-contract changes in risk allocation tend to occur through time-consuming and expensive contract renegotiations aimed at re-establishing financial equilibrium once project realities become apparent. This often leads to an inappropriate transfer of commercial risks to the state, ultimately increasing overall project costs borne by the public sector. When this occurs, the increased costs worsen the ex-post "value for money" prospects of a concession compared with public investment or total divestiture options. The fact that the legal framework in most Latin American and Caribbean countries leaves





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contract adjustments largely unregulated compounds the likelihood and frequency of renegotiations and changes to official agreements. It also raises transparency concerns and increases the risk of rent seeking and adverse concessionaire selection.

Fourth, dispute-resolution mechanisms are only occasionally defined by a country's concession laws and regulations, signalling another important area for improvement. The fairness and openness of bidding procedures are slightly further along, as some countries require public bidding and use effective project-selection variables, although the actual implementation of objective criteria can often take a back seat to political considerations. Special concerns arise in countries such as Argentina and Ecuador, which are increasingly reluctant to recognise international arbitration rulings. Other countries force international investors to partner with local firms. All of this makes the competitive playing field highly uneven for private-sector firms that base their strength on efficiency grounds, reducing their incentive to participate in PPP projects.

The fiscal accounting of concession projects is not appropriate in almost all countries in this study. The possibility of taking fiscal expenditures off the balance sheet creates an incentive to develop concessions for political reasons, assigning the cost of projects to future governments. Since almost no country uses a value-for-money analysis vis-à-vis public-sector project comparators, the efficiency of concession investment programmes is often uncertain. Both Brazil and Peru have made positive steps in this direction at a federal level, though the ultimate results of their efforts are yet to be seen.

The five best-prepared countries in legal and regulatory terms are, in order of rank, Peru, Chile, Costa Rica, Mexico and Brazil. The lowest-ranked countries in this category are the Dominican Republic, Guatemala, Honduras, Venezuela, Ecuador and Nicaragua; however in addition to these six countries, another six are quite unprepared for concession projects from a legal and regulatory standpoint. Although Peru comes first, its score of 66.7 (out of 100) highlights the need for reform in all countries in the region.

Better regulation will require more transparency and fairness for contract adjustments, better definition of risks that by law must be borne by the state, improved criteria for awarding bids, more reliable arbitration schemes, and the establishment of dispute-resolution options for both the concessionaire and the state that will limit hold-up and expropriation risks.

## Institutional framework

Of the 19 countries in the index, only Brazil has all of the institutions needed for adequate concession oversight and design at the federal level. A few others (including Peru and Chile) have competent agencies, but these do not yet fulfil all of the necessary roles. The majority of countries have agencies that are inadequate to one degree or another and are generally prone to political interference. For five countries, either the necessary institutions do not exist or their independence from political influence is quite low.

Independent oversight of service levels and contract adjustments exists only in a few countries such as



Brazil (at the federal level), Chile (only in the water sector) and Peru (in transport).

Although countries fare slightly better in the capacity of their judicial systems to resolve conflicts and enforce contracts than in concession oversight and design, dispute-resolution and contract-management issues hinder the progress of PPP projects in almost all countries. On a scale of 0 to 4 (where 4 is best), eight countries scored only a 2 for the quality of their contract-enforcement practices and concession dispute-resolution efficiency, and another eight scored a 1. No country achieved a score of 3 or 4. For three countries (Argentina, Ecuador and Venezuela), judicial shortcomings regarding concession dispute arbitration, contract enforcement and protection of investor rights were especially problematic.

The success of concession projects is always a balance between the hold-up risks presented by concessionaires and the expropriation risk posed by the state. On one hand, in countries like Argentina, Ecuador and Venezuela, the main concern is the risk of government expropriation. On the other hand, Chile and Mexico struggle more with hold-up risks as project renegotiations are frequent.

Strong institutional design in Latin America and the Caribbean requires a robust system of checks and balances to counter the overly political approach of infrastructure ministries. Capacity and enforcement capabilities are needed at a central level to establish cost-benefit analyses for projects and value-for-money approaches for determining concessions. Finally, finance ministries must do more to account properly for investment subsidies and accurately assess fiscal risks and contingent liabilities. This would reduce both the risk of politically motivated decision-making and the high risk of capture that concession programmes suffer.

## Operational maturity

In the operational-maturity category, countries fared better (on the 0-100 scale) because of wide experience in the transport and water sectors. (Operational maturity is a country's track record for project implementation). For example, some countries had implemented more than 25 projects in these sectors combined (Argentina, Brazil, Chile, Colombia, Mexico); others had less than ten, and a few had only one or none. Although the region has experienced its share of distressed and cancelled projects over the past decade, risk allocation has been very problematic, with renegotiations happening more frequently than they should in an effective project planning and management system. No country has been able to free itself completely from this issue, though recent legal and regulatory reforms in Brazil and Peru may help these countries handle risk allocation more effectively. Finally, a gap clearly exists in the regulatory capacity of some countries to evaluate projects. Chile is the best in the region; its agencies generally have comprehensive project planning, design and financing expertise (though not necessarily on a consistent basis). Argentina, Brazil and Colombia follow close behind, with some of the necessary expertise in place. Concession-project evaluation and proposal frameworks are also lacking; only a handful of countries (Chile, Brazil, Colombia, Costa Rica, Peru) make some effort to use economic and technical project



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considerations to propose, evaluate and design projects.

Interesting conclusions emerged from a comparison of countries' operational-maturity scores with their legal, regulatory and institutional environments. Notably, some countries without strong legal, regulatory and institutional frameworks posted relatively good scores for their operational maturity. Others with reasonably-ranked legal and regulatory frameworks still tended to score better for their operational maturity as well, even when ranks were similar across the two categories. This is because higher volumes of concession projects allow countries to develop some operational capabilities through informal learning rather than from laws and regulations. Though effective in practice, this ultimately damages the long-term integrity of the official frameworks needed for efficient concession-project preparations.

Chile had the best score in this category (73.9), and Trinidad and Tobago the worst (4.3). Brazil followed Chile in this category (at 66.7).

## Investment climate

Political interference in the private sector is a concern for countries throughout the region, though it is more of an issue in some countries than in others. Some unexpected countries, however, rank near the top of the list for the best political environment towards business. Although Chile unsurprisingly comes first, Uruguay, Costa Rica and El Salvador occupy the next three positions. El Salvador's strong showing for the political-distortion indicator may be particularly surprising, given the country's struggle to introduce concessions into its public works and service areas; this indicator is broad in nature, however, and does not refer to concessions specifically.

The LAC region suffers from a weak overall business environment, as defined by macroeconomic stability, consumer willingness to pay for services and business ethics. Chile does best in this area, with Peru second, El Salvador third and Panama fourth. The business environment is least favourable in Venezuela, Paraguay, Jamaica and the Dominican Republic.

Public support for private involvement in state services is limited in most countries in the LAC region. Indeed, survey data shows that many of the region's citizens—20% in some countries and as many as 60% in others—do not support a market economy or private enterprise at all. Largely as a result of social demands and expectations, water provision and sanitation services have been legally redefined as public-domain sectors in countries such as Uruguay, Paraguay, El Salvador and Ecuador. Although this does not always make water and sanitation concession projects impossible, it does significantly complicate their implementation and consideration.



## Financial facilities

Financial markets and mechanisms score a 50 or higher (out of 100) in countries such as Chile, Mexico, Brazil, Panama, Peru, Trinidad and Tobago, and Colombia. Almost all of these countries have at least a liquid, medium-term (5 years +) local-currency debt market and some have hedging options available for infrastructure project funding. Chile has even been able to develop a financing market for post-project completion activities, where concessionaires issue long term peso-inflation-adjusted bonds for annuities markets. Additionally, many institutional investors in these countries are interested in holding long-term debt issues. Even so, both the financially advanced countries of the region and the less developed ones continue to access funding from multilateral institutions and non-local sources. Reducing exchange-rate risk is a key factor for ensuring low-cost financing. Countries that implemented pension reforms in the 1980s and early 1990s have developed more-sophisticated debt markets, which has been important for improving financing options. In contrast, by nationalising its pension system, Argentina has greatly reduced the prospect of developing an efficient, long-term capital market for infrastructure finance.

The risk that governments will not fulfil their debt obligations to foreign and domestic investors is moderate to low for a majority of countries in the region. Several countries (Mexico, Panama, Brazil) have established legal or trust-fund schemes that reduce government non-payment risk for concession projects; others, such as Peru, Trinidad and Tobago, Colombia and Costa Rica do not have specific payment schemes, but their non-payment risk remains moderate. Although Argentina established an infrastructure development trust fund in 2001 to guarantee future fiscal commitments to concessionaires, government payment risk remains high, as the country struggles to repay obligations due from past project renegotiations. In addition to Argentina, for a large minority of countries in the region, government non-payment risk is high, as indicated by poor sovereign-debt risk ratings and specific country experiences. One possible remedy to these problems is available through the World Bank's Multilateral Investment Guarantee Agency (MIGA), which insures private operators against political risk. Yet only a few countries have recently partnered with MIGA to provide political-risk insurance to private participants in the transport or water sectors.

On a regional level, government design of subsidy support for low-income users of water, sanitation and transport services is poor. More often than not, governments provide general subsidies that do not target poorer populations; common schemes include cross subsidies and upfront, short-term subsidies for project investments. This lack of adequate user-focused subsidies makes cost recovery difficult and potentially lowers demand and equitable access for the poor, who typically represent a large part of the country's population. It also increases the total costs paid out by the public sector for a given service, aggravating public-investment deficits.





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# Country comments and ranking tables

This section spotlights the performance of individual countries in the index. It also provides an abbreviated excerpt that outlines the legal and regulatory frameworks governing concessions in each country. For additional detail on the points mentioned below and for more information on individual indicator scores, please refer to the index’s underlying model and “country profile” tab.

## Argentina

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	14th	7th	15th(tied)	12th	13th	13th (tied)
Score	21.9	27.8	12.5	16.8	51.6	20.8

The country’s first and original concession contract law dates from 1967. It was modified in 1989 to regulate private project initiatives and to allow states and municipalities to use it. Since the early nineties, this framework has enabled over 10,000 kilometres worth of highways to be contracted to private providers, as well as railway projects, ports, and sanitary services. However the need to maintain financial equilibrium was often used to renegotiate contracts and obtain post-contract compensation for private-sector operators. In 2000, a new law was passed to facilitate projects where the government finances over 40% of investment through deferred payments and private concessionaires provide services. Regulating entities were also established through sector-specific laws for both transport and water sectors to supervise tariff levels and ensure service quality. Additionally, Law 1299 of 2000 and Decree 678 of 2001 established an infrastructure-development trust fund to guarantee future financial commitments to concessionaires.



## Brazil

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	3rd	5th	1st	2nd	2nd	3rd (tied)
Score	57.8	47.2	62.5	66.7	77.2	62.5

Brazil's legal mechanisms for leasing state assets and establishing PPP projects are in effect at different layers of government; activities are regulated by various laws and regulations such as the 1995 Lease Law, the 2004 Private Public Association Law and individual laws in nine states. Contracts with mixed financing by users and the state are allowed but are subject to congressional approval if the state contributes more than 30% of a project's resources. The legal framework also roots itself in the 1988 Constitution, the Public Contracting Law of 1986 and the Public Tendering Law of 1993. These oblige the state to compensate concessionaires in anticipation of changes in a project's external conditions through an "honest service balance" principle. Contract-modification standards further make it possible to transfer commercial risks to the state despite the fact that the law requires risk allocation between the public and private sectors according to economic criteria. Government fiscal responsibilities are defined through a set of regulations in such a way as to prevent government administrators from using PPPs to improve their fiscal outlook. Projects must be overseen at different stages of implementation, although supervisory responsibilities are not always assigned to the same entity in all cases. For example, in some states contract supervision is the responsibility of state-level regulators; in others, it is the responsibility of the entity that legally authorised the private provision of the service. Federal-level transport-project operations are supervised by the National Transport Regulating Entity (Agência Nacional de Transportes Terrestres—ANTT). The Ministry of Transport is responsible for project planning and design. Municipalities supervise projects for water and sanitary services.

## Chile

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	1st	2nd	2nd (tied)	1st	1st	1st
Score	64.3	61.1	50.0	73.9	93.0	95.8

Chile has a very flexible contract law that allows for contracting of public works so long as they are regulated by the Ministry of Public Works (MOP). Initially approved in 1991, this legal framework was modified in 1996 to enable contractor compensation through a combination of service rates, guarantees, asset contributions and government resources. However, a different, less flexible legal setup was created



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for the port system, which provides a more ad-hoc supervision system. In the water and sanitation sector, Chile either has vertically integrated and privatised regional companies or sources its utility-management function to private parties. Public-works contract law allows unlimited contracting of additional work through direct state negotiation with the contractor. However, compensation clauses are vague, enabling potential transfer of commercial risks from a private party to the state. Nor does the law establish criteria for allocating risk among the different parties; however, it does protect creditors in the event that the MOP decides to fire a concessionaire by forcing repeated project bidding (with a floor price) to ensure project financing. At present, Congress is discussing legislation that will substantially improve risk-assignment and supervision schemes at different project stages by establishing regulations and mechanisms that would increase transparency of contract-modification processes.

## Colombia

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	6th	6th	4th (tied)	6th	10th	7th
Score	39.1	33.3	37.5	44.7	58.6	54.2

Although Colombia does not have any special laws for concessions, the government made it possible to contract out public services through the General Public Acquisitions Act (Act 80). Specific sector laws were also passed, such as Law No. 105 in 1993, to authorise different levels of government to commit funds for highways, a move that facilitates infrastructure development through concession projects. Regulations overseeing such projects often change as a result of resolutions handed down by the Economic Council of Ministers (CONPES) and because of the design of concession contracts themselves. The silence of Act 80 in key contract-renegotiation areas also compels public bodies to establish regulations by decree. This means that significant changes were made to the regulatory framework over a period of only a few years. For example, Decree 4533 of 2008 issued by the Ministry of Transport allows contractors to submit substantial modifications to concessions granted without any limits on deadlines or costs. Thus, it is possible to indefinitely extend a deadline and use state assets by means of a concession without being subject to a fairly regulated tender for all project components. The complexities created by such decrees, along with the different regulatory and contracting powers at different levels of government, have thereby created a system where regulations do not properly oversee concessions. Act 80 compels the state to re-establish the balance of a project's economic equation as defined in a project's contract "when unforeseen factors arise that alter it or which cannot be blamed upon the concessionaire". Finally, laws and regulations in place make project financing difficult and burden equity holders.



## Costa Rica

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	5th	3rd (tied)	9th (tied)	3rd	8th	9th
Score	45.1	50.0	25.0	55.0	61.3	41.7

Costa Rica's Public Works Concessions Act of 1998 enables the participation and regulation of private investment in public projects irrespective of the government agency responsible for contracting the service or asset. An executive secretariat in the National Concessions Council (Consejo Nacional de Concesiones—CNC), which is an autonomous agency under the Ministry of Public Works and Transport, bears the responsibility of preparing, tendering and supervising projects. The CNC executive secretariat is also in charge of monitoring project construction and operations. However, the bodies responsible for contracted public services that benefit from fiscal resources can vary. The law establishes a contractor's right to be compensated in the event that a project's financial situation changes. However, laws do not clearly establish creditors' rights to future concession-project cashflows, a problem that generates risk for investors in cases of premature contract termination.

## The Dominican Republic

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	8th	14th (tied)	9th (tied)	8th	17th	13th (tied)
Score	25.2	16.7	25.0	38.6	35.8	20.8

The Dominican Republic does not have any specific concessions laws. All concession contracts must be approved by Congress, giving political considerations much influence over project selection and execution decisions. Once a project has been approved, it is regulated in general terms under the Law for Public Purchases and Acquisitions 360-06. Under this legal framework, each government principal is responsible for supervising the various stages of a concession project. The law obliges concession contracts to explicitly assign the main risks of an infrastructure project to participant parties and requires that projects maintain their economic balance, implicitly transferring commercial risks to the state. The legal framework also compels regulations to be established for each individual contract separately. A fragmented system for public-works supervision has been put in place. The agency responsible for public works receives 50% funding from the Ministry of Public Works and has a separate minister to head up the unit. No independent project supervision is required from entities other than the government principal that created a concession for the asset or service.





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## Ecuador

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	17th	18th (tied)	18th (tied)	7th	15th	16th
Score	14.5	5.6	0.0	39.4	38.4	16.7

Ecuador has experienced two key periods of development with regards to its legal and regulatory framework for concessions. The country first passed a State Modernisation Act in 1993 to delegate public services to the private sector. This law included the transport, drinking-water and drainage sectors. A National Council with ministerial powers was also established to supervise PPP processes. Additional laws specific to sectors were passed in subsequent years, which along with the Modernisation Act facilitated private participation in ports, highways, airports, and water and drainage systems. However, regulations established that the economic equation of a contract must be maintained, paving the way for multiple contract renegotiations and excessive transfer of commercial risk to the state. Yet the new 2008 state constitution made significant changes to the previous frameworks. Article 314 states that government is responsible for public and “universal” service provision, ensuring “fair” prices. Article 316 of the constitution states that “the state may, as an exception, delegate...exercising these services...out to private initiative”. Article 318 points out that public water and drainage services and the supply of drinking water will be rendered exclusively by state-owned or community legal bodies. These constitutional rules make existing concession initiatives highly vulnerable to expropriation and obligatory contract changes, also decreasing the likelihood of developing new projects. The central government has already attempted to annul existing concessions such as the Port of Manta, the Quito airport and select drinking-water concessions.

## El Salvador

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	10th	13th	9th (tied)	10th	11th	8th
Score	23.9	19.4	25.0	20.8	58.4	45.8

The 1983 Constitution and the Acquisitions Act of 2000 allow concessions to be granted for public services and works. However, they do so in general terms, and approval of Congress is required for each individual project. The concessions concept is restrictive in as much as the projects must be developed at the risk and cost of the contractor without any funds from public entities. Political polarisation makes it virtually impossible to establish ad-hoc legislation or pass contract laws for specific projects. Therefore, in practice



it is difficult to carry out any concession projects in the transport, water and drainage services sectors. For several years, the government has placed priority on concessions for the Ports of Acajutla and Unión; yet, the difficulties in obtaining legal approvals indefinitely delay any success.

## Guatemala

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	16th	14th	9th(tied)	15th	18th	10th
Score	18.0	16.7	25.0	8.7	33.4	29.2

Article 130 of Guatemala's constitution provides that the state should protect the market economy, prohibiting all types of monopolies and privileges that would restrict market freedoms. Guatemala does not have a general concessions law or a PPP statute, but the Ley de Contrataciones del Estado of 1992 establishes four articles of a general nature that permit tenders for concession projects. The Constitution compels each contract, and any modifications of a contract, to be approved by Congress. The Constitution also establishes a mechanism for expropriating land and requires payment prior to taking possession, which makes it difficult to secure land for infrastructure projects. Each contract defines regulations of a given concession, leading to regulatory instability. Nonetheless, Congress has approved in the first instance a PPP law that could significantly improve the regulatory framework for private participation in transport, water and drainage infrastructure.

## Honduras

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	11th	14th (tied)	4th (tied)	9th	14th	18th
Score	23.7	16.7	37.5	21.3	39.8	8.3

The Honduran constitution mandates that concession projects be approved by Congress. The 1998 Promotion and Development of Public Works Law and a law to designed to create the Superintendency of Concessions and Licences established regulations that facilitate concessions for transport, water and sanitation infrastructure projects. The regulations are very restrictive in that they allow only the private sector to receive revenue from users. There is no provision for the state to fund part of the investment. The length of concessions is 22 years, generally too short to appeal to investors. With such restrictions in place, Honduras has been able to pursue only modest improvements in infrastructure through concessions. Moreover, the legal framework for acquisitions established the concept of



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financial equilibrium for PPP contracts, which allows the private sector to transfer risks back to the state. It is hoped that a new framework law for transport will be introduced soon; the International Monetary Fund has asked the government to redirect public spending towards this priority area, as part of a new stand-by agreement approved in April 2007. The law would allow the private sector to obtain concessions to operate Puerto Cortes, the country's main port. It was also hoped that the Defence and Promotion of Competition Law passed in 2006 would help open up both state-dominated markets and private monopolies, but by end-May 2008 this had not yet happened. The government continued to exert monopoly control in maritime ports, sanitation services, rail and water provision.

## Jamaica

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	9th	8th (tied)	4th (tied)	11th	19th	17th
Score	25.1	25.0	37.5	17.0	13.3	12.5

There is no single, common legal framework for regulating concessions in the transport and water sectors; each sector has specific laws that authorise the incorporation of the private sector as a service provider and govern concessions. The Parishes Water Supply Act permitted private participation in the provision of water services at the rural level. At the city level, the National Water Commission Act of 1980 details the operation of the National Water Commission in urban areas. The National Water Act of 2007 transferred oversight responsibilities for water quality and policy decision-making power to the Ministry of Health and placed quality-assurance responsibilities on operators. The 2002 Toll Road Act established conditions for PPP projects in the road sector. The Airport Authority Act of 1974 created regulatory responsibilities to the Airport Authority and produced a very general framework to delegate activities to the private sector. Later, in 2002, the Airport Economic Regulation Act granted authorities the power to oversee and designate private airport operators. The Port Authority Act of 1972 established regulations for public ports in the country and created the Port Authority of Jamaica. Under these various laws and regulators, Jamaica has managed to develop road, airport and port concessions for the transport sector and has also developed concessions in the water sector, albeit on a minimal scale. However, regulatory responsibilities between licence-granting bodies and national regulatory authorities are split, depending on the sector, producing a heterogeneous framework in which rules are flexible and subject to change.



## Mexico

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	4th	3rd (tied)	4th (tied)	5th	5th	2nd
Score	47.5	50.0	37.5	47.3	65.1	66.7

Mexico does not have an integrated concession law for infrastructure sectors. The power to issue a concession or contract for infrastructure projects with the private sector rests with different legal bodies for each sector and level of government. State governments have their own legislation and procedures for approval. This heterogeneous framework is cumbersome for promoting private-sector participation in infrastructure. To correct this situation, PPP contracts, called Service Project Provision (PPS), have been structured by regulations contained in the Public Acquisitions Law of 1983. However, PPS contracts do not allow for project modifications. The law also establishes the concept of financial equilibrium, which forces the state to take on risks and increases ex-post opportunism. In the transport sector, federal law grants supervisory roles to the departments within the Ministry of Transport for all steps of every project. In the water and sanitation sector, PPS contracts can be offered by municipal firms, which are also responsible for the supervision of each project stage. This sector is much atomised, since each municipality is responsible for service provision in most cases. In a few metropolitan areas, larger companies have developed to span several municipalities.

## Nicaragua

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	18th	18th (tied)	15th (tied)	16h (tied)	12th	19th
Score	10.0	5.6	12.5	8.5	53.7	4.2

Nicaragua has a special PPP law for concessions for the road sector. Law No. 264 of 1997 established a framework for concessions where the revenues for tolls can be complemented by subsidies. Also under the law of the ENAP (Empresa Nacional de Puertos), the national port company can license specific infrastructure, according to 1997 regulations. In 1998 the Drinking Water and Sewage Law (Law 297) split the national water company into a regulatory agency (Instituto Nicaragüense de Acueductos y Alcantarillas—INAA) and an operating company (Enacal), a move that authorised the government to seek private investment in the sector and was considered a prelude to the eventual privatisation of Enacal. A public-contracting law supplemented this by requiring public bidding for these types of projects. Regulations contained within the law consider the obligation to maintain concessions' financial



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equilibrium. This obliges the concessionaire to request adjustments if it feels that financial equilibrium has been altered. For projects that require subsidies for operations or investment, such subsidies must be approved by Congress. Projects that are self-sufficient do not require prior approval. The inability to commit future revenue flows from the project in favour of a third party (creditors) make project financing for private concessions almost impossible. The maximum term for concession contracts is 30 years. The Ministry of Transport and Infrastructure plays the contracting, supervising and economic oversight roles.

## Panama

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	15th	8th (tied)	15th (tied)	14th	7th	3rd (tied)
Score	21.0	25.0	12.5	8.8	62.8	62.5

The Ministry of Public Works' Law No. 5 of 1988 regulates the creation of concession projects in various sectors including roads and airports. The country's law No. 5 offered public land rights to concessionaires, though conflicts over interpretation obliged the government to modify the law to allow compensating concessionaries with public land. Ports have a separate legal framework and are addressed through contract-laws approved by Congress. This results in a more ad-hoc arrangement for each port. The state has established regional firms in the water and sanitation sector, as well as a plan to create a regulatory body that would permit the sale of 51% of equity shares to incorporate private capital. Indeed, Law No. 2 of 1997 established the legal and regulatory framework to incorporate private-sector capital, but political difficulties have prevented implementation. The restructuring of the public water company IDAAN (Instituto de Acueductos y Alcantarillados Nacionales) in response to the political difficulties of privatisation left a regulatory vacuum in the water sector, and neither water nor transport sectors benefit from oversight or supervision provided in the legal and regulatory framework. Furthermore, contracts' financial equilibrium considerations have often been used by road concessionaires to solicit substantial modifications to project contracts, resulting in the paralysis of important works (such as the Panama-Colón highway project).



## Paraguay

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	13th	8th (tied)	9th (tied)	16th	9th	11th(tied)
Score	22.3	25.0	25.0	8.5	59.4	25.0

The Concession Works and Public Services Law No. 1618 passed in 2000 established the legal framework that allows the central government, government departments and municipalities to offer concessions. Concessions must be authorised by law, by departmental ordinance or byelaws. Once the work is authorised, it can be put out for concession by executive decree. The respective ministry is responsible for undertaking preliminary studies, qualifying proposals and executing the contracting process through an obligatory public bidding process. The length of the concession cannot exceed 30 years. In practice, Paraguay has very little experience with concession projects. However, the Ministry of Public Works and Communication (Ministerio de Obras Públicas—MOPC) recently presented a tentative plan for future road-network concessions within the so-called Plan Triángulo. In the drinking-water sector, Law No. 1614 sets the legal framework and tariff structure for public service and provision of drinking water and water sanitation. This law specifies that public agencies will always be the competent authorities in this area and that delegation of service provision should favour municipal governments. The regulatory entity for sanitary services (Ente Regulador de Servicios Sanitarios—ERSSAN) has final control over service provision, supervises the quality and efficiency levels of the service, protects the interests of the community and users, and audits and verifies application of the legal provisions in force. ESSAP (Empresa de Servicios Sanitarios del Paraguay), a public firm, provides drinking water and sewage service for about 72% of the urban population.

## Peru

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	2nd	1st	2nd	4th	4th	5th
Score	58.9	66.7	50.0	53.0	70.0	58.3

A public-works concession law has been in place since 1996 and allows public works to be contracted out to the private sector for highways, water-sanitation works and airports. Without replacing the main concessions law, another series of laws were passed in 2008 to provide more flexibility regarding financing and risk-allocation options. Compensation for changes in financial equilibrium is limited to cases in which legal changes have specific impacts on the project. The supervision of the technical aspects





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of a project during the preparation and execution phases is also handled by the sectoral authority. President García signed the Regional and Local Public Investment with Private Participation Law (Law 29230, May 20th 2008), making it easier for the government to attract public investment by relaxing some of the conditions for approving disbursement of funds through the National Public Investment System (Sistema Nacional de Inversión Pública—SNIP). An earlier norm, Supreme Decree 104/2007-EF (July 19th 2007), approved guidelines for the provision of public services through co-financed concessions involving the government and private sector. This framework also regulates private investment and the participation of different government bodies in the project-approvals process. The agency in charge of privatisations, ProInversión, will now concentrate on major infrastructure concessions by managing the bidding and contractual stages of federal projects.

## Trinidad and Tobago

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	12th	8th (tied)	9th (tied)	19th	6th	5th (tied)
Score	22.9	25.0	25.0	4.3	64.3	58.3

Trinidad and Tobago does not possess a legal framework to establish concessions in transport or water sectors. Public entities regulate ports and airports, and they develop activities on their own or through concessions. For example, in 2006 a process was initiated to establish a private operator for the Port of Spain, although a firm project award has not yet materialised. In the road sector, no toll roads have been contracted through concessions either. The Ministry of Works and Transport is responsible for planning the development of infrastructure in roads, ports and airports. Infrastructure operations are the responsibility of sector authorities. In the water sector, the Water and Sewage Authority (WASA) serves as the country's water and sanitation authority and provider. In the late nineties, a management contract between WASA and a British water company was implemented as an interim step to concession out WASA operations and turn the agency into a regulatory entity. However, this plan was ultimately discarded, and only one investment contract for operation of specific services for water desalination was offered. As a consequence, WASA remains the main operator for drinking water and sanitation services. Apart from water and transport, other sectors have been more effectively concessioned out in the past, as private investment has been effectively mobilised for the electricity and telecommunications sectors.



## Uruguay

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	7th	8th (tied)	4th (tied)	13th	3rd	11th (tied)
Score	27.3	25.0	37.5	13.3	76.2	25.0

Uruguay established a legal framework for public works concessions with Law No. 15.367 in 1984. This framework is of a general nature, leaving project details up to each contract. The law permits investment in the transport and drinking-water sectors at various levels of government. Using the 1984 law as a foundation, road concessions and a transport-corridor concession in Rio de la Plata were developed in the nineties. A later law from 1991 reorganised the port sector into regional firms and included the option of concessioning out specific terminals. In 2001 the government developed a new road-concessions system, called the Roads Mega Concession (Megaconcesión). In this scheme, the ministry created a National Road Company to operate over 1,000 kilometres of roads, as well as to manage additional roads whose concessions have expired. This company can incorporate up to 40% private capital and is responsible for contracting private construction companies to develop and maintain the network. It must obtain financing from the market or from government subsidies. In reality, this creates a quasi-state monopoly without any formal regulator. In the water sector, a law allowed the state firm, Obras Sanitarias del Estado (OSE), to award concessions in cities and specific regions. After the first concessions were implemented in Maldonado, however, a political movement forced a constitutional reform that made all hydrological resources subject to social considerations before economic ones. It further authorised the termination of any concession that threatened social principles. On a more general level, current regulations require adherence to financial equilibrium and do not allow the use of arbitration mechanisms to resolve conflicts.

## Venezuela

	Overall index	Laws and regulations	Institutional framework	Operational maturity	Investment climate	Financial facilities
Ranking	19th	17th	18th (tied)	18h	16th	13th (tied)
Score	7.1	8.3	0.0	4.8	37.1	20.8

At the outset, various road-concession projects were developed by leveraging the general framework established in public contracting laws. However, in 1999 a uniform, national-level framework (Law No. 5.394) was created for roads, ports, airports and water sanitation services. This law obliged regions or municipalities to create an entity that would be responsible for guiding and carrying out PPP projects. This law also outlined bidding mechanisms, firm rights and government rights during the concessions process.



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Concessionaires' rights include the right to maintain a project's financial equilibrium, allowing the private firm to solicit revisions to a project's economic regimen and term length. In the drinking-water and sanitation sector specifically, the 2001 Drinking Water and Sanitation Service Provision Law (Ley Orgánica para la Prestación de los Servicios de Agua Potable y de Saneamiento) was created to regulate the supply of services through concessions. It also formulated a standard for auditing, monitoring and evaluating these services. The clauses contained within this law apply to drinking water and sanitation providers regardless of whether these are public, private or a mix of both. Regions and municipalities can use this law to offer concessions in works and services. In 2007 changes to the law transferred the functions previously served by the National Office and the Superintendency to the state company Compañía Anónima Hidrológica (HIDROVEN).

## Appendix 1: Calculating the Index

Indicator scores are normalised and then aggregated across categories to enable a comparison of broader concepts across countries. Normalisation rebases the raw indicator data to a common unit so that it can be aggregated.

The three indicators of quantitative data where a higher value indicates greater experience with concessions, a better business climate or better political environment have been normalised on the basis of:

$$x = (x - \text{Min}(x)) / (\text{Max}(x) - \text{Min}(x))$$

where  $\text{Min}(x)$  and  $\text{Max}(x)$  are, respectively, the lowest and highest values in the 19 countries for any given indicator. The normalised value is then transformed from a 0-1 value to a 0-100 score to make it directly comparable with other indicators. This effectively means that the country with the highest raw data value will score 100, while the lowest will score 0.

For quantitative indicators where a high value indicates low performance— for example public opinion against using the private sector to develop the economy—the normalisation function takes the form of:

$$x = (x - \text{Max}(x)) / (\text{Max}(x) - \text{Min}(x))$$

where  $\text{Min}(x)$  and  $\text{Max}(x)$  are, respectively, the lowest and highest values in the 19 countries for any given indicator. The normalised value is then transformed into a positive number on a scale of 0-100 to make it directly comparable with other indicators.

Modelling and weighting the indicators and categories in the model results in scores of 0-100 for each country, where 100 represents the highest quality and performance, and 0 the lowest. The 19 countries assessed can then be ranked according to these indices.

### Qualitative data

All qualitative indicators have been “banded” on a scale of 0-4 and scored by the research managers and the Economist Intelligence Unit’s team of country analysts. The scores are then transformed to a 0-100 score to make them comparable with the quantitative indicators.

## Weighting the Index

At the conclusion of the concession readiness research exercise, the Economist Intelligence Unit selected a series of default weights deemed appropriate for the overall index calculation. These weights are not meant to represent a final judgment on relative indicator importance. These may be changed by users at will. The indicator and category weights are given below.

- 1. Legal and regulatory framework: 42%**
- 2. Institutional framework: 25%**
- 3. Operational maturity: 25%**
- 4. Investment climate: 4%**
- 5. Financial facilities: 4%**

## Appendix 2: Detailed indicator definitions

### Legal and regulatory framework

**(1) Consistency and quality of PPP regulations:** “How consistent are PPP laws and regulations at different levels of government and across sectors? Do regulations establish clear requirements and oversight mechanisms for project implementation (project preparation, bidding, contract awards, construction and operation)? Must risk be allocated to different parties according to ability to manage them? Is there a clear system for compensating the private sector for acts of authority that change sector-specific economic conditions not foreseen during bidding?” Also considers if regulations avoid open-ended compensation rights for changes in financial equilibrium so that the state only assumes explicitly written commercial contractual contingent liabilities.

- Scoring: 0=The legal framework is so cumbersome or restrictive that in practice transport or water concessions are extremely difficult to implement; 1=The legal framework allows concessions, but it is ill defined and risk allocation and compensation is unclear and inefficient; 2=The legal framework allows concessions and also establishes general, open-ended oversight, risk-allocation and compensation rules; 3=The legal framework is generally good and coherent, addressing risk-allocation issues while leaving some ambiguity with regards to compensation schemes and project implementation; 4=The legal framework is comprehensive and consistent across sectors and layers of government, addresses risk-allocation and compensation issues according to strict economic principles and establishes sophisticated and consistent oversight of project implementation

**(2) Effective PPP selection and decision-making:** “Do regulations establish efficient planning frameworks and proper accounting of contingent liabilities? Have regulators determined appropriate project planning and cost-benefit analysis techniques to ensure that a PPP is the optimal project-financing and service-provision option? Does the Budget Office systematically measure contingent contractual liabilities and account for delayed investment payments in a way consistent with public investment accounting?”

- Scoring: 0=Decision-making processes are not defined– they are erratic and subject to change, without accounting for liabilities; 1=Decision-making processes are defined but are occasionally



followed, and liability accounting is not well established; 2=Decision-making processes are defined and upheld but accounting practices are not adequate; 3=Proper decision-making is both defined and used for PPP project decisions, although liability accounting should be improved for more-consistent decisions; 4=PPP project selection is a consistent result of various efficiency, cost-benefit and social-evaluation considerations required by law and accompanied by rigorous accounting practices

**(3) Fairness/Openness of bids and contract changes:** “Do regulations unfairly favour certain project bidders and operators over others? Do regulations require and establish competitive bidding (that is, use of objective criteria during the selection process, requiring the publishing of necessary bidding documents, contracts and changes in contracts)? Do regulations require bidding for any significant, additional work necessary? Is a system established for independent oversight of such renegotiation procedures and conditions?”

- Scoring: 0=Regulations unfairly favour certain bidders over others, transparency requirements are not in place and contracts are changed in a discretionary manner; 1=Regulations introduce some bias towards particular parties, and bidding, transparency and renegotiation schemes are poor; 2=Project bidding is fair and transparent, but renegotiations and expansions are regulated poorly; 3=Regulations generally define a fair playing field, with considerations for contract expansion, renegotiation and adjustments; 4=Regulations establish fair and transparent bidding procedures, set limits to renegotiations and adjustments and require independent oversight of post-award procedures

**(4) Dispute-resolution mechanisms:** “Are there fair and transparent mechanisms for resolving controversies between the state and the operator? Does the law provide technically adequate and efficient conciliation schemes? Must arbitration rulings proceed according to law and to contracts, without lengthy appeals?”

- Scoring: 0=Dispute-resolution systems for PPPs are undefined and insufficient; 1=Dispute-resolution mechanisms exist but these are not transparent or efficient; 2=Adequate dispute-resolution mechanisms exist but arbitration and appeals are lengthy and complex; 3=Comprehensive, effective dispute-resolution mechanisms exist, incorporating necessary technical considerations; 4=Effective and efficient dispute-resolution mechanisms establish independent arbitration according to law and contracts, without lengthy appeals and with accompanying viable prejudicial reconciliation options

## Institutional framework

**(5) Quality of institutional design:** This indicator evaluates the existence and role of various agencies necessary for proper PPP oversight and planning, such as a PPP board at ministerial level, a State Contracting Agency and a PPP Advisory Agency and a Regulatory Agency for enforcement of project standards. It also considers the oversight role and involvement of government budget and planning offices.

- Scoring: 0=PPP-specific agencies or boards do not exist and relevant institutions in this sector lack accountability and independence from rent seekers; 1=Some oversight and checks and balances exist, but these are not comprehensive and agencies are highly prone to political distortion; 2=Agencies exist and are fairly technical in nature but do not play all necessary roles for comprehensive sectoral oversight; 3=The necessary agencies exist and generally fill all necessary roles for sector oversight, though their structure and roles could be improved; 4=The institutional design establishes satisfactory oversight and planning agencies, and incorporates checks and balances so as to ensure effective planning, regulation and increase accountability

**(6) PPP contract, hold-up and expropriation risk:** “Does the judiciary enforce property rights and arbitration rulings? Does the judiciary uphold contracts related to cost recovery? Can investors: appeal against rulings by regulators, expedite contract transfer for project exit and obtain fair compensation for early termination?” Also considers whether the state has an expedite mechanism for replacing failed operators, to protect creditors’ rights.

- Scoring: 0=The judiciary poorly enforces PPP operator and investor rights and arbitration rulings, and there is no effective appeals process; 1=The judiciary occasionally upholds PPP operator and investor rights and arbitration rulings, but in an inefficient manner; 2=The judiciary usually upholds contracts, PPP operator and investor rights and arbitration rulings but hold-ups are common; 3=The judiciary consistently and effectively upholds contracts and allows for appeals to regulator rulings, ensures fair compensation for early termination and transfer of contracts, although delays occur and can generate hold-up risk; 4=The judiciary effectively enforces PPP operator and investor rights and arbitration rulings, allowing for expedited contract transfers and ensuring that early termination occurs only in exceptional public-interest circumstances, with fair compensation to the operator and protection to creditors

## Operational maturity

**(7) Public capacity to plan and oversee PPPs:** “Are public capabilities for planning, design/engineering, environmental assessment, oversight of project service standards and conflict resolution robust? And do government officials have expertise on project financing, risk evaluation and contract design? Do financial authorities employ proper accounting practices when considering fiscal and contingent liabilities? Do they have a reputation for designing contracts that reduce post-bid opportunism?”

- Scoring: 0=Agencies do not have any of the necessary expertise or experience; 1=Agencies have very limited project expertise and experience; 2=Agencies have some project planning, design and financing expertise or experience; and oversee service quality to a limited extent; 3=Agencies generally have the necessary comprehensive project planning, design and financing expertise and experience, exhibiting moderate service quality oversight capacity; 4=Agencies have the necessary expertise and experience and effectively regulate the sector on a consistent basis

**(8) Methods and criteria for awarding projects:** “What is the track record of PPP Agencies for using competitive bidding and objective economic factors as the primary consideration in final project and contract awards? Are incentive-efficient schemes used for allocating projects (for example, in toll-road projects, using net present value of revenue with contract periods of variable length)?”

- Scoring: 0=The granting agency awards projects based on subjective considerations and does not use objective, economic variables; 1=The granting agency has a poor track record, but does consider economic factors with some limits to discretion; 2=The regulator considers economic criteria to award projects although these are not always the most efficient and appropriate ones, and subjective factors still play an important role; 3=The regulator has a good track record that could be improved (that is, it uses economic variables but does not give these priority over other factors); 4=The regulator has an excellent track record and uses economic criteria in an effective, transparent and consistent manner

**(9) Regulators’ risk-allocation record:** “Has the allocation of risk between the state and private sector been successful in recent years? How effective has been the use of guarantees and performance bonds for project risk diversification?”

- Scoring: 0=Risk allocation is often handled inappropriately; 1=Risk has been allocated properly in only certain occasions, as evidenced by high instances of contract renegotiation, and hedging and insurance instruments have been minimally used; 2=Risk is usually distributed fairly between the state

and the operator, but renegotiations are still common and financial instruments such as insurance, guarantees and performance bonds are occasionally used; 3=Risk has been fairly distributed, renegotiations have been moderate and parties employ some financial risk-hedging practices; 4=Risk has been consistently allocated correctly between the state and the private sector to minimise renegotiations, with extensive and effective use of financial instruments

**(10) Experience in transport and water concessions:** This indicator shows the number of transport and water concession and greenfield projects in the past ten years (1997-2007) in each country, as recorded by the World Bank's Private Participation in Infrastructure (PPI) database. Scoring is conducted on the basis of raw data, where a higher number of projects is better.

**(11) Quality of transport and water concessions:** This indicator evaluates the percent distress and failure rate of transport and water PPPs over the past ten years (1997-2007). Figures are taken from the World Bank's PPI database.

- Scoring: 0=For countries with five or more projects in the PPI database, this indicates a project failure/distress rate above 20%. For countries with less than five water and transport projects, this indicates a failure/distress rate of 25% or above; 1=For countries with five or more projects in the PPI database, this indicates a project failure/distress rate between 14% and 20%. For countries with less than five water and transport projects, this indicates a 0% failure/distress rate; 2=Failure/distress rate between 8% and 14%; 3=Failure/distress rate between 3% and 8%; 4=Failure/distress rate between 0% and 3%

## Investment climate

**(12) Political distortion:** Evaluates the level of political distortion affecting the country's private sector. Each country's score is a weighted average of the Economist Intelligence Unit's political stability and government policy effectiveness risk scores and the World Bank public sector ethics index. Scores range from 0-100, where 0=worst and 100=best.

**(13) Business environment:** Evaluates the quality of the general business environment for infrastructure projects. Each country's score is a weighted average of the Economist Intelligence Unit's market opportunities and macroeconomic risk scores and the World Bank corporate ethics index. Scores range from 0-100, where 0=worst and 100=best.

**(14) Social attitudes towards privatisation:** This indicator uses aggregated survey data on public attitudes in each country. The survey data referenced represents the proportion of respondents who:

disagree that the market economy is best for the country, disagree that the market economy is the only system with which the country can become a developed country, and who disagree that private enterprise is indispensable for development. Scores range from 0-100, where 0=best and 100=worst.

## Financial facilities

**(15) Government payment risk:** “Does the government regularly fulfil obligations for PPP contracts or use liquidity-guarantee schemes to reduce non-payment risk?” Also considers the Economist Intelligence Unit’s sovereign-debt risk ratings and whether countries have had active partnerships with the World Bank’s Multilateral Investment Guarantee agency during the past five years to insure transport or water projects.

- Scoring: 0=The government struggles to fulfil obligations to concessionaires; 1=The government occasionally fulfils obligations; 2=The government usually fulfils obligations; 3=The government usually fulfils obligations, and provides some minimal guarantees to investors, 4=The government has an excellent track record of fulfilling obligations, and provides strong guarantees to investors. Please note: in certain cases where project- or sector-specific information was not obtainable, scoring considers the Economist Intelligence Unit’s sovereign-credit risk ratings. For these instances, scoring employs the following guidelines: 0 = rating of CCC and below, 1= B rating, 2= BB rating, 3 = BBB and A rating, and 4 = AA or AAA rating

**(16) Capital market for private infrastructure finance:** “How available and reliable are long-term debt instruments for infrastructure financing? Is there a developed insurance and pension market with useful products for infrastructure risk reduction? Are interest-rate, exchange-rate hedging instruments available?”

- Scoring: 0=The markets for finance and risk instruments are underdeveloped or nonexistent, and only foreign sources provide project funding; 1=The market for local finance is slowly developing, though most finance comes from international sources and risk-hedging instruments are not robust; 2=Some finance and risk instruments exist, though financing still mainly comes from foreign and multilateral organisations; 3=The domestic market presents a large, reliable financing market but risk instruments are still developing in size and complexity; 4=There is a deep, liquid finance market locally, as well as a reliable and large local market for hedging instruments

**(17) Marketable debt:** “Is there a liquid, deep local-currency-denominated, fixed-rate, medium-term (5 yrs +) bond market in marketable debt (that is debt that is traded freely)?”

- Scoring: 0=There is no securities market for fixed-rate financing of over one year; 1=There is a government securities market in place, though for short maturities only; 2=The government is fostering a medium-term market and it should be in place soon; 3=There is a medium-term (5 yrs +) debt market but only for public-sector (government bond) issuers; 4=There is a medium-term (5 yrs +) debt market for both public- and private-sector issuers

**(18) Government support for low-income users:** “Does the government provide subsidies that allow low-income users to better access water and transport services?”

- Scoring: 0=The government does not subsidise the water or transport sector, or has done so in an extremely distortionary manner; 1=The government does not subsidise the water or transport sector, or has done so in a moderately distortionary manner; 2=The government occasionally provides subsidies for improved access for the poor in water or transport, but these are infrequent or applied only in certain cases; 3=The government usually provides satisfactory subsidies for low-income users, but this can vary by sector and project; 4=Subsidies are common, reliable and effectively target low-income users.



## Appendix 3: Methodology and sources

### Methodology

The methodology for this benchmarking study was created by the Economist Intelligence Unit research team in consultation with the Multilateral Investment Fund. Indicators were conceptualised at a workshop attended by international and regional sector experts and practitioners in late December 2008. Index design and research was finalised in January and February 2009, and was informed by previous frameworks developed by the World Economic Forum, the United Nations Development Programme and by consultations with regional sector experts at the World Bank.

The Economist Intelligence Unit research team gathered data for the index from the following sources (please see the bibliography for a more complete listing):

- Interviews and/or questionnaires from sector experts, consultants and government officials
- Legal and regulatory texts
- Economist Intelligence Unit country risk ratings and country reports
- Scholarly studies
- Websites of government authorities
- Local and international news media reports
- The Latinobarómetro and the Latin American Public Opinion surveys
- Inter-American Development Bank country strategies and Public Policy Management and Transparency Network documents
- The World Bank's Private Participation in Infrastructure database
- The World Bank's Multilateral Investment Guarantee Agency project database
- Transparency International

Qualitative scores were assigned to each country for each indicator based on an assessment of relevant information from three main sources: legal and regulatory texts; interviews and questionnaires; and infrastructure rankings such as the World Economic Forum's Infrastructure Private Investment Attractiveness Index (IPAI), which covers 11 Latin American and Caribbean economies included in this study. Secondary reports were also referenced on a country-specific basis. For the financial facilities category, we considered a number of sources, including the Economist Intelligence Unit's sovereign-debt risk ratings, marketable-debt risk ratings and *Country Finance* reports.

## Concept definitions

**Financial or economic equilibrium:** This is an equation that relates costs, revenues and return on investment for private sector participants. The equilibrium principle is specified in project contracts and makes important assumptions about demand levels, proper service levels, a project's financial stability (including transfer payments to the government) and project investment costs.

**Collusion risk:** the risk that private-sector bidders or operators will create agreements among themselves that do not benefit the sustainability of a project or the government-financing portion.

**Hold-up risk:** Risk that private-sector actors will lengthen arbitration processes in order to skew outcomes in their favour.

**Acts of authority:** Unilateral actions by the government to change the economic specifications and terms of a contract.

**Equity arbitration:** A more informal arbitration regime where parties attempt to resolve disputes based on fairness and equity considerations rather than using a strict application of the law.

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## Interview and questionnaire participants

Due to the sensitive nature of the content of this report, we will not disclose the names of individual participants. Twenty in-depth telephone interviews were conducted with country infrastructure experts from multilateral institutions, sector consultants and government officials. Eight additional questionnaires were submitted by a separate group of sector practitioners.

The regional distribution of interviews was the following:

- Four interviews were conducted for the three countries in the Caribbean region, plus one additional questionnaire
- Seven interviews were conducted for the Central American region, plus two additional questionnaires
- Nine interviews were conducted for South America, plus five additional questionnaires

## Individual participants

- Vanesa Sanchez was the project manager. She works in the Country and Economic Research division of the Economist Intelligence Unit in New York. She can be reached at [vanesasanchez@eiu.com](mailto:vanesasanchez@eiu.com)
- Dr Eduardo Bitrán is a professor at the Adolfo Ibañez University in Chile. He was joint research manager for this study and can be reached at [Eduardo.Bitran@vtr.net](mailto:Eduardo.Bitran@vtr.net)
- Dr Marcelo Villena is an associate professor of Economics at the Adolfo Ibañez University in Chile. He was joint research manager for this study and can be reached at [Marcelo.Villena@uai.cl](mailto:Marcelo.Villena@uai.cl)
- David Bloomgarden is a project specialist at the Multilateral Investment Fund (MIF). He can be reached at [davidb@iadb.org](mailto:davidb@iadb.org)
- William Shallcross, the principal of F1 Research, built the Excel model. He can be reached at [will@f1research.com](mailto:will@f1research.com)

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LONDON

26 Red Lion Square

London

WC1R 4HQ

United Kingdom

Tel: (44.20) 7576 8000

Fax: (44.20) 7576 8476

E-mail: london@eiu.com

NEW YORK

111 West 57th Street

New York

NY 10019

United States

Tel: (1.212) 554 0600

Fax: (1.212) 586 1181/2

E-mail: newyork@eiu.com

HONG KONG

6001, Central Plaza

18 Harbour Road

Wanchai

Hong Kong

Tel: (852) 2585 3888

Fax: (852) 2802 7638

E-mail: hongkong@eiu.com