

Learning in Twenty-First Century Schools

Note 4.

Public-Private Partnerships in School Infrastructure in the Caribbean

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Public-Private Partnerships in School Infrastructure in the Caribbean

A public-private partnership (PPP) is a long-term contract between a private party and a government agency to provide a public asset or service, in which the private party bears significant risk and management responsibility.¹

PPPs come in various shapes and sizes (box 4.1). More than 50 countries apply their own versions in a variety of sectors. A PPP can be strictly defined as a long-term contractual arrangement between the public and private sectors for the provision of infrastructure or services, an alternative to the procurement methodologies historically used by the public sector. The PPP model has demonstrated its viability, particularly in terms of “value for money,” especially in health and education, where the services covered by the PPP relate to a combination of assets and services needed to meet the public sector’s obligations. Payments to the private sector are calculated on the basis of the availability of assets and the quality of performance. In other words, payment is made for services rendered, and not to fund the construction of the underlying asset (buildings, roads, schools, etc.). In such an arrangement, the private sector is commonly responsible for designing and constructing the asset, as well

as for its long-term operation and maintenance. In almost all cases, it is also responsible for funding the project, with banks providing project finance.

In Latin America and the Caribbean (LAC), major economies such as Brazil, Chile, Colombia, and Mexico have implemented cost-effective, multisector PPP procurement programs and have adopted appropriate legal, regulatory, and institutional structures to handle the PPP process. Others, such as Uruguay, have taken concrete steps in this direction by passing PPP legislation and building the institutional capacity to manage and monitor the process. Several Caribbean countries are now considering the use of PPPs to modernize their infrastructure and improve the delivery of public services, with Jamaica and Trinidad and Tobago currently providing the most advanced examples in terms of the institutional arrangements that have been put in place (PPIAF 2014).² Trinidad and Tobago is currently undertaking preliminary detailed analysis to determine the potential value for money of two pilot projects involving, among other things, the PPP-based procurement of 10 early-childhood education centers and 10 primary schools.

1. This differs from other forms of private sector participation in infrastructure, such as privatization, where the ownership of an asset is transferred to private hands or a joint-venture, where the relationship between the public and private parties is defined in a shareholders’ agreement.

2. The Public-Private Infrastructure Advisory Facility (PPIAF) is a multi-donor trust fund that provides technical assistance to governments in developing countries that wish to improve their ability to attract and retain private investment.

BOX 1.**Common variants of PPPs**

In the broadest sense of the term “partnership” between the public and the private sectors, contractual arrangements can include:

Public service contracts

- DBO (design–build–operate)
- O&M (operate–maintain, service contract)
- OMM (operate–maintain–manage, service contract)

Concession-style contracts

- BOT (build–operate–transfer)
- BOOT (build–own–operate–transfer)
- DBFO (design–build–finance–operate)
- DBFOT (design–build–finance–operate–transfer)
- BTO (build–transfer–operate)
- BOO (build–own–operate)
- BBO (buy–build–operate)
- LRO (lease–rehabilitate–operate)
- BOLT (build–own–lease–transfer)

An additional variant, in economic terms, will relate to the ability of the contractor to receive payment from the public (“third-party income”) in the context of the project. Although the opportunities for this are generally limited in the education sector, one area would include the possibility for the private sector contractor to lease or hire the facilities (e.g., assembly hall, sports field, other) for social activities in the local community or some alternative usage during holiday periods (conferences, workshops, etc.).

Underpinning the financial viability of PPP projects is the long-term commitment of the public sector to pay for the services rendered, provided the services meet the standards set out in the contract. To this extent, agreement on the long-term objectives and

contractual responsibilities of the parties is fundamental to successful partnership. Risks are assumed by the party best able to manage them, helping to make the project attractive to banks and other financiers.

A national PPP procurement methodology offers distinct advantages in situations where certain prerequisites are met. First among the prerequisites is the existence of an investment requirement, both at the macro and project levels, sufficient to justify the approach. Second, there must be sufficient interest and capacity in the private sector (nationally or internationally) to evaluate the project risks, to provide structured financing, and execute and deliver the project. Third, there must be political commitment, a supportive legal and regulatory framework, and adequate institutional structures for project development, procurement (notably transparent and well-managed tendering procedures), and long-term contract management. Channels and mechanisms must be available for dialogue with the private sector.

Any government embarking on a PPP program will need to demonstrate that the necessary resources are available and that the first project procured is not the last. The public sector must enjoy a good credit rating and payment record. Only then will the private sector be persuaded that the intellectual and financial effort of bidding on (and perhaps losing) the first tender is worth the effort. PPPs should always be seen as programs and never as a one-off project-driven exercise. Only on such a basis should a government contemplate the expenditure involved in creating the institutional capacity to manage this new procurement methodology.

Among the advantages of a sound PPP approach to investment in educational infrastructure are greater value for money in public expenditure, transparency and predictability of long-term expenditure, a higher quality of services to taxpayers, optimal distribution of risk between the public and private sectors, superior performance on long-term maintenance, and access to private capital, the innovation that comes with competition, and advanced technical and management

skills. The latter helps ensure on-time delivery of assets and startup of operations, thereby reducing or eliminating delays, cost overruns, and renegotiations. The public sector pays for defined assets or services as and when they are delivered, and the service provider can be held accountable for performance.

In order to respond to the diversity of investment situations posed in the education sector, several different PPP forms may be considered in parallel to meet the different requirements at the national level. However, given the underlying conceptual framework for the PPP policies currently being adopted in the region, with its emphasis on payment for services delivered or made available, the PPP model assumed in this chapter will be the British Private Finance Initiative (PFI) and design-build-finance-operate (DBFO) variants, as extensively applied not only in the U.K. PFI program but also in current and former Commonwealth countries (Australia, Canada, India, South Africa, and Singapore), as well as in Brazil, Colombia, Mexico, and, more recently, Jamaica and Trinidad and Tobago.

The study on which this chapter is based was conducted in 2012–13 (Livingston 2013) to help the governments of Barbados, Jamaica, and Trinidad and Tobago assess the potential of PPPs to stimulate private sector investment in education infrastructure. It was anticipated that the three cases might provide insights for other countries in the region.

After a short discussion of the basics of the PPP approach applied to the education sector, we will discuss the following specific topics, with a focus on the three countries studied, before offering conclusions.

- Multi-project design, procurement, operations, and maintenance
- The challenges of strengthening procurement using PPPs
- Institutional capacity
- The legal and regulatory context
- Funding and fiscal considerations

- PPP financing structures and the capital markets
- A project-based PPP approach: how to get there

Basics of the PPP approach in the education sector

One of the drivers for adoption of the PPP procurement option is the scale of the infrastructure investment challenge. Every dollar spent must deliver the optimum result. The three jurisdictions covered in this study face similar problems, exacerbated in the case of Barbados and Jamaica by a deteriorating fiscal position. Given the commitment of each government to ensuring that the island should be able to compete internationally, key infrastructure segments such as transport, health, and education are explicitly recognized as requiring significant investment. The ability of the private sector to rise to the challenge and the willingness of the public sector to provide the appropriate context for successful PPPs lies at the heart of governmental concerns.

The need for investment in the education sectors of all three jurisdictions was clearly established at the time of the study, albeit on a much smaller scale in Barbados. The number of establishments on which a PPP program might focus would be conditioned by the dispersion of each age group, usually on the basis of smaller units at the primary level, moving up through a smaller number of establishments at the secondary level to a far more limited number of large institutions at the tertiary level. The buildings' age, general condition, and suitability ("fit for purpose") for the different levels of education varies significantly. This suggests two categories of PPP:

- "Greenfield": new buildings or full-scale refurbishments procured through a variant of a DBFO (or DBFOT) and enshrined in a long-term contract. Construction and operations and maintenance (O&M) are rolled into a single contract remunerated on the basis of quality of service delivered and/or availability of the facilities.

- “Brownfield”: partial refurbishment and maintenance of existing facilities, possibly contracted on a performance-based medium-term contract (5–10 years), of the kind more commonly found in the roads sector.

A key factor of the study’s diagnostic is also the focus of public policy. In other words, which segment of youth (but also of professional and continuing education audiences) was regarded by the Ministry of Education and other relevant bodies as particularly deserving attention and related investment?

Depending on the student segment to which the new procurement was to be applied, the following factors could be expected to have an impact on the design of the PPP strategy:

- The per unit investment budget and any modular additional services to be provided, e.g., sports facilities, laboratories, IC technology, other installations.
- The sophistication of the teaching environment contemplated for each segment.
- The geographical dispersion of projects in each segment.

The analysis conducted in the context of the work undertaken under this program demonstrated clearly that, in the larger economies (Jamaica and Trinidad and Tobago), the requirement for enhancement and upgrading of education infrastructure was very significant, with the number of early childhood centers, primary schools, and secondary schools needed to meet demographic growth amply justifying possible recourse to a PPP approach, whether “greenfield” or “brownfield.” For obvious reasons of size, the situation in Barbados is somewhat different, with the number of new projects limited by the size of its population and its geographical compactness.

The adoption of a PPP model implies the design of a procurement strategy having as its principal objective, through optimal competition, the generation

of better value for money, on the one hand, and improved services to the consumer, on the other. The size of the economy, the interest of an adequate number of engineering and contracting firms to ensure proper competition, the ability of the public sector to underwrite the associated project development costs, and the willingness of the private sector to contemplate the tender-related transaction costs associated with bidding under a new and complex procurement modality such as PPP—all these factors will influence the strategy to be adopted.

The enthusiasm (or lack thereof) with which the private sector will receive a new procurement methodology depends on several factors. One of the most critical is the private sector’s perception of the public sector’s ability to manage a complex procurement process. Specifically, the “risk-reward ratio” analysis that a potential bidder will do when considering whether or not to bid for a particular PPP opportunity will include the target country’s historical procurement experience. The more complex or opaque procurement may historically have been, the greater the private sector bidder’s wariness of entering into new and untested procurement processes. Given the potential transaction costs for the private bidder, it is evident that the overall proposition must be seen to provide opportunities to recover bidding costs in the event of winning the tender.

Key issues arising in PPP-style procurement include the following:

- The optimum process for the prequalification of bidders and the possibility of arriving at a restricted, but optimum, number of bidders for the final stage
- The allocation of sufficient time to run a complex tender
- Clarification of the concessionaire’s ability to sub-contract

- Clear assignment of the public sector's obligations for the project's security package,³ defining the investor's ability to:
 - obtain a security interest in the project company's assets or cash flow
 - establish the priority of that security interest with respect to those of other creditors of the project company (e.g., shareholders)
 - enforce the security interest when necessary
- A clear position about the availability of foreign exchange, which will be of particular interest to potential foreign participants in any bid
- A clear position as to the distribution of certain risks or issues, including
 - demand risk
 - the modalities of dispute resolution
 - force majeure
- The definition of contract termination provisions
- A clear statement about the potential impact of ancillary legislation (environmental, social, etc.) on the procurement of the services under a concession-style contract. An example of the latter would include the application of legislation relating to the transfer of employees from the public sector to the concession company.

In all three study countries, to a greater or lesser extent, foreign investment groups have undertaken major investments in that country, indicating that the procurement context, albeit imperfect, has not been sufficient to deter such investment.

Barbados

The small size of the island and the limited number of potential projects to be undertaken mean that, to a large extent, projects will select themselves.

3. The security package is a combination of sureties and performance guarantees that provide assurance of the borrower's repayment capacity.

Nevertheless, the following overarching concepts could be borne in mind when assessing the benefits of a PPP procurement model. The limited investment requirement of Barbados militates against the general adoption of costly and protracted institutional and legal and regulatory reforms. For that reason, until the Ministry of Education, Science, Technology, and Innovation (METI) decides to adopt the PPP model in the education sector, a limited number of procurement innovations may be applied to specific projects considered suitable for a PPP approach.

Any PPP tender should preferably aim to offer a capital investment opportunity of not less than US\$10–20 million (BBD\$20–40 million).

Jamaica

Predictably, the range of unit capital investment estimates to vary significantly between levels in Jamaica's education system, from a figure of US\$0.5 million at the early childhood level to US\$3 million at the primary school level and up to US\$8 million at the secondary level.

Any PPP tender should aim to present a capital investment opportunity of not less than US\$15–20 million (approximately J\$165–220 million). Given the unit capital costs indicated above, this implies that the PPP tender at the primary level would need to contemplate a minimum of four to five schools; at the secondary level, a minimum of three to four schools.

A government discussion document on the funding of the education sector, seen at the time of the study, proposed the construction on a PPP basis of 10 to 15 secondary schools and recommended adopting the PFI model, promoting long-term contracts stretching to 25 to 30 years. Staff, teaching, and curricula would remain the responsibility of the public sector. The recommendation also foresaw the possibility of the private developer using the infrastructure for other purposes outside school hours. The site placed at the disposal of the private sector would be

accounted as a contribution to the development program by the public sector.

The benefits flowing from such an approach were considered to include:

- Provision of additional school places within a significantly shorter timeframe (18 to 24 months) than previous procurement policies had been able to deliver.
- Extension of contract payments over 25 to 30 years, with annual expenditure amounts considered to be manageable based on historic levels, implying the ability to meet education and development targets as set out in the government's Vision 2030.

Trinidad & Tobago

Given the need to execute some 200 individual early childhood centers over the period 2012–15 and given the geographical characteristics of Trinidad and Tobago, it appeared logical to assume that these 200 projects could be broken down geographically into subgroups of, for example, 5–6 units.⁴

The advantage of such a modular approach lay in the fact that, once the Ministry of Education had established the outputs that it sought for the early childhood environment, the specification of those outputs would be presented as the basis for the procurement of a series of multicenter contracts. The degree of variation between one bundle of centers and the next would be the result of the private sector's design capacity, and might—if a number of contracting groups were signed up—vary from one bundle to the next. The modularity could furnish an additional benefit, insofar as it would allow the ministry to compare performance between one bundle and the next.

The range of unit capital investment estimates was expected to vary significantly between segments

in the education system, with a figure of US\$2.3–2.8 million (TT\$15–18 million) in the early childhood segment, US\$3–4 million (TT\$20–25 million) in the primary school segment, and up to US\$3–4.7 million (TT\$20–30 million) in the secondary segment.

Multi-project design, procurement, operations, and maintenance

As previously noted, the public sector seeks to maximize the benefits to be derived from a situation in which the private sector not only builds, but also designs, finances, and subsequently operates and maintains the asset on a long-term basis. This approach, by transferring to the private sector the design risk that the public sector has historically retained, with well-documented negative economic results in the form of delays and cost-overruns in procurement and construction, ensures that the private concessionaire is fully cognizant from the outset of the potential maintenance costs associated with his design. From the public sector's point of view, as mentioned above, this integration of design and O&M into a single package provides better value for money when extended over a concession period that is long-enough to accommodate a “whole-life costing” approach.

Given the design, construction, and maintenance challenges inherent in an education establishment at the primary or secondary level (as compared for instance with the more sophisticated infrastructure and facilities associated with tertiary educational infrastructure), the economic and practical sense of subcontracting construction and other activities on a geographic basis should be considered.

Drawing on the experience, for example, of the LIFT (Local Improvement Finance Trust) program in the United Kingdom, ministries of education may wish to examine the merits of procuring the design, construction, and O&M of bundles or clusters of education establishments in a single contract that would protect the potential for obtaining value for money while also simplifying procurement. The main contractor would

4. After this study was completed, the Ministry of Education decided to go forward with 10 early childhood education centers and 10 primary schools on a PPP basis, in accordance with the recommendations given.

be obligated to operate on an “open book” basis, thereby enabling the Ministry of Education to monitor the value for money of the process.

Another interesting example is offered by the Scottish Future Trust’s “hub,” in which several local authorities came together to contract with a development partner to whom a pipeline of school projects was then offered on a “right of first refusal” basis. The value-for-money parameter is covered in part by market testing of the prices proposed by the developer, which undertakes the design, construction, and, in some cases, the funding of the capital projects. Measures are taken to avoid the risk of a developer “cherry picking” the best projects, and to ensure that an optimum cluster of schools is covered. In this fashion, some of the costs historically incurred by developers bidding on multiple contracts are reduced. Experience to date indicates that, in the selection of projects, the form of cluster adopted requires particular attention to ensure that all individual projects can move forward in unison. Difficulties or delays associated with any single school in the cluster will slow down the entire program. In these projects, the demand risk is retained by the public sector, and the lessons learned about life-cycle costing from the PFI and Building Schools for the Future programs have been retained.

The bundling of a group of smaller projects, in the context of a procurement approach driven by value for money, poses a series of problems that require close attention. Issues to be considered include, for instance, “bundling” versus “batching.”

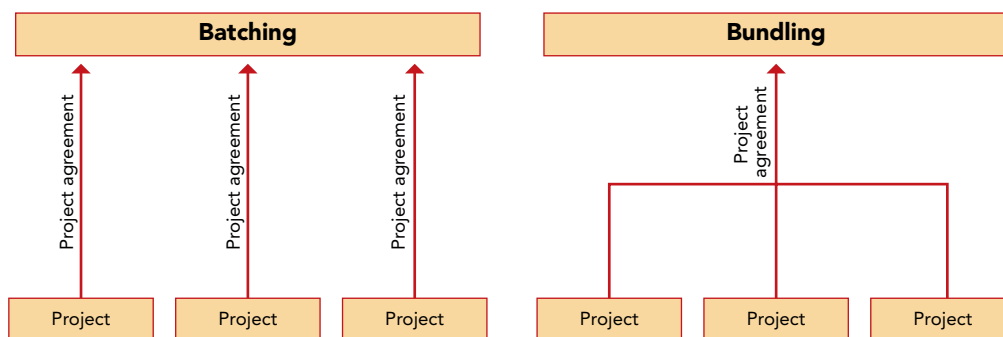
The SFT glossary (www.scottishfuturetrust.org.uk) defines the two terms as follows:

- **Batching.** The grouping together of projects for procurement under a single framework agreement within one project structure but leading to individual project agreements for each
- **Bundling.** The grouping together of associated services/projects in order to acquire more advantageous financing as a single service/project.

Figure 1 demonstrates the key difference between the two approaches. The benefits of this approach are:

- The ability to generate valid and verifiable economies of scale in terms of time, effort, and cost, deriving from, among other things, the procurement of advisors for a group of projects rather than for individual projects
- A larger project size, with implications in terms of funding, market response, and so on

FIGURE 1.
Batching and bundling contrasted



- The ability to launch all subprojects simultaneously, so that the program convoy does not move at the speed of the slowest
- Uniformity of project risk across all projects, so that funding cost is not adversely affected by a single project of higher risk.

Whether a project is developed and executed as a PPP or under a more traditional procurement modality, the hard reality is that—for reasons of location, demographics, topography, and land titling—every project is to a large extent unique. Although, in theory, there is no reason why a standard, perhaps modular, infrastructure design could not be adopted across the sector, it remains true to say that each individual center or school will require analysis in its own right.

The challenges of strengthening procurement using PPPs

The way public-sector procurement is presently done in Barbados, Jamaica, and Trinidad and Tobago poses impediments to timely and cost-effective procurement of projects that are as complex as the average PPP. The difficulties proceed from combinations of the following factors:

- Technical and financial inexperience at the sectoral level
- Failure to underwrite the financial and human resource requirements for proper project design, preparation, procurement, and implementation
- Inadequate project evaluation and design, resulting in suboptimal risk distribution between the public and private parties to the contract
- Inappropriate political timetables
- Poor long-term project management.

These and other obstacles can be properly addressed through clear and robust methodologies applied under realistic timetables at each stage of the project cycle. It must be recognized that even if more

money must be spent on project preparation (including the advisory services of procurement specialists), the additional spending is likely to be far less than the costs of poorly prepared projects, inefficient tender procedures, and subsequent cost-overruns and procurement delays.

Performance-based contracting is not new in any of the three countries, but designing projects in such a way as to benefit fully from it requires an understanding of its implications on the part of both the procuring authority and the private firms potentially interested in bidding for the contracts. By its very nature, the PPP model relies on the robustness of the contract and its underlying cash flow, rather than on guarantees by the public sector. This represents a significant challenge for the private sector in the region, but it also imposes on the public sector, and in particular the procuring authority, the responsibility to fully understand the PPP model.

The current state of public procurement in the three countries, as well as efforts to improve procurement processes to handle more complex projects such as PPPs, is reviewed below.

Barbados

At the time of the study, public sector procurement in Barbados was governed by the Financial Management and Audit Act (Act 2007–11) and Financial Management and Audit Rules (2011). Major procurement is vetted by a tenders committee chaired by the chief supply officer and including representatives of the Ministry of Transport and Works, the office of the Solicitor General, the Ministry of Commerce and Trade, and the line ministry responsible for the specific procurement. When funds are made available from the Inter-American Development Bank's Multilateral Investment Fund, the Public Investment Unit (PIU) of the METI is also represented on the committee. Breaches in procurement rules result in the project being sent back to the line ministry for correction. Broadly speaking, the technical capacity of

the government of Barbados resides in the Ministry of Transport and Works, which works closely with the Central Purchasing Department, a nonministerial public agency. Some major procurement decisions are taken directly at cabinet level.

In the course of the PPP study, personnel at the Central Purchasing Department and in several ministries expressed the view that any move toward procurement via PPP should be preceded by a serious capacity-building effort to ensure that all parties understood what was involved.

Procurement legislation and institutionalization of the procurement cycle regulate the process by which public entities and utilities tender contracts for works and services. At the time of the study, Barbados had little comprehensive procurement legislation addressing the full range of issues associated with a complex public procurement process. More comprehensive legislation would be useful in guiding the process and providing transparency for investors and stakeholders.

In the absence of a broad institutional move toward the adoption of the PPP procurement modality, it is likely that any PPP-style procurement of education infrastructure would have to be tailored to the individual project. Presently, there is no explicit obstacle to the adoption of a tailor-made prequalification, procurement, and negotiation process, so long as transparency, equity, competitive tension, and procedural reliability are maintained. If funding were made available from multilateral sources such as the World Bank or the IDB, the specific procurement rules of these institutions would overrule national procedures.

At the time of the study, the IDB was supporting the government of Barbados in modernizing the island's procurement system through a loan (BA-L1004). One area identified as requiring attention was the public sector's process for handling unsolicited bids and proposals, situations in which a private investor presents a proposal to the public sector with a view to securing the latter's support for the implementation of the project. Under PPP legislation in many countries (but

not yet Barbados), the public sector reserves the right either to reject the project or to decide to implement it, assuming leadership of the tender process. In such circumstances the proposer normally is offered a slight advantage over other bidders, such as the opportunity to match the lowest bid or a price advantage.

Jamaica

Taking the PPP concept to include concessions, Jamaica has a good deal of relevant experience, principally in the transport sector.

The installation of a PPP unit inside the Development Bank of Jamaica in late 2012, the extensive experience of the DBJ team, and the benefit derived from advisory support provided to the team by external consultants mean that Jamaica is in a position to benefit from PPPs. The handling of unsolicited proposals from the private sector is specifically covered in a new policy on partnerships.

Trinidad & Tobago

Procurement in Trinidad and Tobago is governed primarily by the Central Tenders Board (CTB) Ordinance of 1961. Government studies in 2005 closely examined the main strengths and weaknesses of national procurement processes. An August 2005 white paper by the Ministry of Finance on "Reform of the Public Sector Procurement Regime" provided a broad analysis of the issues, noting the need, among other things, to strengthen and promote confidence in public institutions and to ensure that domestic procurement practices conform with international best practice.

Previously, attempts had been made to simplify and accelerate the procurement process through the use of so-called special purpose companies (SPCs), including Education Facilities Company, Ltd., some of which have encountered difficulties.

The 2005 white paper prepared by the Ministry of Finance pointed out that the CTB was neither involved at the design stage of projects nor responsible or

equipped to monitor project implementation. Additionally, the fact that some procuring agencies (for example, SPCs) were not covered by the CTB's oversight had provoked concerns relating to "guidance and control, lack of transparency and accountability, and unfair practice."

Given the government's decision to move forward with a series of PPP projects, the uncertainty generated by earlier problems required careful and constructive handling to ensure that the new projects were not compromised when they finally come to market. At the time of this writing, new procurement legislation was making its way through the parliamentary system and is expected to be passed in early 2015. The latest draft makes explicit reference to PPPs and treats all procuring institutions on the same basis, while leaving details of process to subsequent regulation.

The government's current PPP policy has the following aims:

- Achieving value for money
- Being fiscally responsible
- Ensuring transparency and probity in the identification, development procurement, and management of PPPs
- Ensuring environmental and social sustainability of PPP projects.

The PPP criteria are therefore feasibility and economic viability, commercial viability (in terms of the availability of qualified private parties to undertake the project), value for money when compared with alternative public sector procurement modalities, and fiscal responsibility.

To take advantage of ongoing efforts to modernize the national procurement process, the study drew attention to some of the areas on which procurement reform should focus in order to raise private sector participation in the provision of education infrastructure. The modernization effort should identify the capacity building and administrative strengthening

required at the level of the public sector for a transparent and robust project procurement process. Crucial to the design of an appropriate administrative environment are procedures that enhance the transparency, efficiency, reliability, and competitiveness of the procurement process. As noted, difficulties in this area had led to the adoption of alternative procurement routes, including the use of SPCs, which have not escaped their fair share of problems.

Presently, weaknesses can be found in the following stages of the PPP project cycle:

- Preliminary project evaluation and selection, including cost-benefit and value-for-money analysis
- In-depth project design
- Procurement of specialized advisors to support the sponsoring authority
- Economic and financial viability analysis
- Procurement strategy definition
- Prequalification and tender management
- Post-contract project monitoring and management.

But compared with most states in the Caribbean region, the capacity of the Trinidad and Tobago's public sector to develop PPPs is relatively good. A specific PPP unit has been established inside the Ministry of Finance and Economics, and, with the support of advisory groups, the unit is preparing foundational documents and guidelines.

Institutional capacity

PPP projects require careful coordination and management at every stage. Whereas overall responsibility for a PPP project should generally be retained by the sectoral contracting authority, interaction between all agencies and actors must be coherent and cost-efficient. When assessing the risks associated with committing resources in a public tender for a schools cluster, the private sector will pay particular

attention to the administrative and decision-making arrangements that have been put in place for the procurement. Indications of disagreement or poor coordination between public sector actors will send warning signals to potential bidders as to the coherence, transparency, and cost-effectiveness of the procurement process. Procurement documents at expression-of-interest and request-for-proposal (RFP) stages should specify not only the process but also the roles and responsibilities of all interested parties on the public sector side.

Barbados

The METI is responsible for strategy and investment in education and science, including improvements to education assets and infrastructure. It is also responsible for education policy and for the legislative and regulatory framework within which education is provided at the national level.

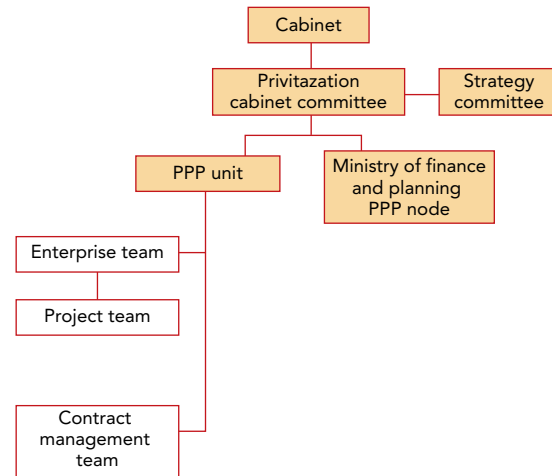
In the absence of a specific PPP implementation institution (such as the PPP units in Jamaica and Trinidad and Tobago), much rests on the in-house ability of the METI (and its PIU) to manage the complexities of project evaluation, design, financial modeling, contract preparation, prequalification, tendering, negotiation, and contract monitoring and management. It can draw as needed on the ministries of finance and of transport.

Jamaica

“Shaping New Partnerships for National Development–Policy and Institutional Framework for the Implementation of a Public-Private Partnership Programme for the Government of Jamaica: The PPP Policy,” adopted in 2012, provides clear guidance about the institutional arrangements for managing PPP projects, as illustrated in Figure 2.

The project team in the figure is responsible for structuring the PPP, evaluating whether it meets the PPP criteria, and drafting the business case and the Cabinet presentation. Once the business case is

FIGURE 2.
Organization chart for PPPs in Jamaica



complete, the project team drafts project agreements (with assistance from legal counsel), qualifies bidders, participates in pre-RFP consultations, drafts and issues the RFP, conducts the tender, and evaluates bids.

Ministries and agencies are responsible for identifying candidate PPP projects. In the context of making their annual strategic plans, they are expected to consider whether a PPP would be a good method for acquiring new assets or services covered by the plan. Ministries and agencies submit candidate projects to the PPP unit, with all the information required for screening them.

Under the terms of a memorandum of understanding between the Ministry of Education (MoE) and the National Education Trust (NET) that establishes the collaborative framework between the two entities “to undertake activities associated with the construction, extension, refurbishment and maintenance of education infrastructure and facilities for the public school system,” NET acts as the agency through which the government of Jamaica “executes its strategic objectives” and plans and executes “a national programme for the systemic provision of Education Infrastructure.” NET is also explicitly responsible for education infrastructure development projects and for increasing

“national institutional capacity” to undertake such projects. Responsibility for identifying demand and making arrangements to acquire potential school sites to meet that demand rests with the MoE.

In terms of institutional arrangements, the MoE establishes a Project Executing Unit at the Ministry to cover both implementation and issues relating to “change management.” To strengthen NET’s capacities and balance sheet, legislation was, at the time of the evaluation, in progress to transfer the necessary public land to NET for new building projects.

Trinidad & Tobago

As laid out in the government’s May 2012 PPP policy framework, PPPs are to be administered by a ministerial committee with oversight over policy, project selection, accountability, and contract management. The functions of the PPP unit in support of the committee are defined, including its role as a “center of excellence” in all matters relating to PPPs. Its responsibility for ensuring coherence and coordination of the PPP project development process is also established. Crucially, the committee must give its approval before the contract is signed and implementation begins, which may be seen to represent a quality control “gateway” in the implementation process. The framework also recommends the creation of a “PPP execution team for each project,” the hiring of specialist transaction advisors to support the project, and the establishment of a “contract management team.” These can be considered the essential building blocks of a coherent PPP project implementation strategy.

A key element of the government’s PPP policy is found in the statement that “the responsible Government agency retains overall responsibility for ensuring service is provided to the quality required.” The government agency “may be a Ministry, a State Enterprise, a Statutory Body, or any other government contracting authority.” This underlines the need to ensure that an adequate understanding of the PPP

procurement methodology is transferred to the project’s implementing institution, in this case the MoE and, potentially, the Education Facilities Company Ltd (EFCL, discussed further below), a special purpose company (SPC) set up in 2005 to manage the procurement and maintenance of education infrastructure.

A PPP project must establish, in the early stages of the project cycle, an appropriate interinstitutional working group. Once a preliminary consensus has been reached about the PPP project to be developed, an organigram is drawn up to define the interaction between the contracting authority, in this case the MoE, and the PPP unit, as well as other relevant departments.

The PPP unit established within the Ministry of Finance and Economics in August 2011 is currently staffed by a coordinator and a project officer, supported by an administrative assistant. Since the unit was established, the capacity of the PPP unit has grown, and the PPP model has spread across the public sector. As set forth in the May 2012 Cabinet Minute, the unit’s responsibilities are to develop and disseminate PPP policy, to regulate the PPP program, to develop the project pipeline, and to serve as a repository of skills and knowledge.

Because PPP project development is a collaborative endeavor in which the sectoral ministry plays a central role, the success of the process will depend on the creation of a cost-effective inter-institutional structure to prepare, tender, and ultimately manage the PPP contract.

The Programs and Projects Planning and Management Unit (PPPMU) was established inside the MoE as a “single unit or point of management” for all MoE programs and projects to ensure greater efficiency and the standardization of management methodologies and core and support business processes. Although none of the specified functions of the PPPMU makes specific reference to issues relating to infrastructure, the overall breadth of the PPPMU’s

involvement indicates that this body will play a vital role in any process aimed at the development of a PPP capacity for education infrastructure in Trinidad and Tobago.

A state agency created in 2005 to manage construction and maintenance contracts related to education infrastructure, EFCL has a staff of some 160 people. As an SPC, it operates according to its own internal regulations, having its own board and management, and is not limited in the size of the investments it may undertake. Upon completion of construction contracts, EFCL hands over responsibility to its repair and maintenance division in the primary and secondary sector. EFCL currently deals with some 600 separate maintenance contractors. Such contracts are generally based on a one-off “cost-plus job specification”; the concept of long-term payment against maintenance to prescribed standards does not appear to have been applied to date.

The legal and regulatory context

In any analysis of the legal and regulatory environment for PPPs, consideration is given to whether more visible legal and regulatory reforms or adjustments may be required to foster the implementation of the PPP model and program.

The merits of a specific PPP law often rest on whether the reform might make the market significantly more attractive to offshore bidders. Given the time frame usually associated with the passage of new legislation, particularly legislation with significant financial or private sector implications, much depends on the ability of the governments to prepare the ground while the legislative process takes its course. The experience of Uruguay is relevant in this case. There, PPP project preparation began at least 12 months before passage of the PPP law in mid-2011.

The existence of a full PPP law, therefore, is not a necessary prerequisite to moving ahead with projects. In fact, a strong argument exists for drafting a law only

when enough hands-on experience has been gained to ensure that the law is workable in the national context. It is worth noting that Mexico waited nearly a decade to pass a formal PPP law in early 2012. Ultimately, a key yardstick is the willingness of bidders from outside the country—and, most critically, the willingness of their bankers—to commit resources to a long-term contractual relationship with the host government.

Barbados

Barbados is a common law country and therefore, in general terms, well-suited to the adaptation of PPP models from comparable jurisdictions—the United Kingdom, Australia, New Zealand, South Africa, Singapore.

From the perspective of an infrastructure PPP, a major focus of any applicable law must be such contractual aspects as public sector payment obligations and the rights of the various parties. The other area of concern relates to laws and regulations that determine procurement processes.

In Barbados, the PPP methodology is more likely to be adopted for individual projects than as part of a broader, strategic approach forming part of a full commitment by the government, at least at this stage. The passage of new legislation is rarely a speedy or simple process and, although certain countries such as Brazil and more recently Morocco have passed PPP legislation before launching the program itself, this does not appear to be a cost-effective option for Barbados. Additionally, given the skepticism with which the model was regarded by the public sector at the time this study was done, a successful PPP procurement in a high-visibility project might serve as a powerful demonstration and smooth the path for legislation, if, in the final analysis, legislation were still considered necessary.

Jamaica

Since late 2012, PPPs as a fully recognized procurement option have advanced through several steps. The attribution of responsibility for PPPs to the private sector division of the DBJ and the decision to establish a “PPP node” inside the Ministry of Finance and Planning showed that PPPs had been chosen as an option for the procurement of infrastructure and social services. In late 2012, the minister of finance emphasized that education would be a priority sector in PPP terms.

The 2012 policy document discussed in the previous section situated the PPP strategy within the context of fiscal rationalization, public sector transformation, and privatization, but made no specific reference to existing legislation or the legislative impact or implications of the new policy. Nor did it foresee the preparation of PPP-specific legislation.⁵

The Jamaican experience in concession-based contracts probably constitutes a reasonable basis for contracts centered on “availability” or “performance,” concepts that lie at the heart of the PPP model. Other than limitations imposed by the maturity of the financing for a particular project, there appear to have been no obstacles to writing contracts for a concession period of 20 or more years. Based on the analysis done by advisors to the government when drawing up the PPP strategy, the government appears to have concluded that a dedicated PPP law was not needed.

Both of the relevant public sector entities, in this case the MoE and the NET, are fully empowered to become parties to PPP contracts, although the process is subject to administrative procedures governing public sector procurement. In the absence of detailed administrative regulations defining the tender phase of the PPP procurement process, arrangements can be tailor-made for each specific tender.

5. This is fully consistent with an earlier conclusion that, given the commonality between Jamaican law and that of other common law jurisdictions in which significant PPP programs had been implemented, such as the UK, Australia or New Zealand, there appeared to be no urgent need for a special PPP law.

The most sensitive area in the future stages of the education infrastructure PPP initiative is likely to be the manner in which the prequalification and tender processes are designed and managed. Discussions with the DBJ’s PPP unit at the time of the study indicated that, in the area of legal and regulatory strengthening, emphasis was being placed on the procurement process per se, rather than on the specifics of PPPs. The PPP institutional design report” prepared by the government’s external advisors identified two areas for potential strengthening:

- The onerous procedures surrounding the contracting of advisors, which could negatively affect the timeliness of developing a PPP project
- The handling of unsolicited proposals, which, although contemplated under the current administrative procurement procedures, needed to be handled with particular care in the context of potential PPP situations.

Trinidad & Tobago

The experience of Trinidad and Tobago in concession-based contracts will probably allow for contracts based on “availability” and/or “performance,” concepts that lie at the heart of the PPP model. Concession periods of 20 or more years do not appear to have posed obstacles. The MoE and the Ministry of Tertiary Education and Skills Training (MTEST) are fully empowered to become parties to PPP contracts, although their participation will be subject to the administrative procedures governing public sector procurement as laid down in the Central Tenders Board act, or any successor legislation, as is discussed earlier in this report.

In advance of the creation of the PPP unit, PricewaterhouseCoopers submitted a report in December 2012 that examined, among other things, the general question of the merits of specific PPP legislation to underpin government policy for the sector. The report concluded that although investors in PPP infrastructure projects need “a stable, open, and reasonably

safe legal framework to mitigate the significant political risks involved in PPP contracts,” market practice had shown that many successful PPP programs had been developed in the absence of such a framework. The existence of a PPP law in isolation was no guarantee for a successful PPP program. In the course of their analysis, PricewaterhouseCoopers examined the role of the Central Tenders Board and its enabling act and came to conclusions similar to those presented earlier in this report, namely that current procurement regulations were inflexible and inadequate for the purposes of PPP procurement, recommending the inclusion of specific PPP wording in future legislative reforms.

Funding and fiscal considerations

Given fiscal constraints in recent years, governments have tried to identify innovative financing structures to circumvent limitations imposed by significant debt. Crucial in any such structure would be the reduction of upfront capital requirements, but in a manner that confirms the ability of the government to meet its long-term obligations.

At an early stage, as important as value for money in any analysis of a PPP project’s economic and financial impact is the determination that the public sector will, over the long term implicit in PPP contracts, be able to meet its obligations to the private parties in the PPP contracts it signs. This is generally referred to as the “affordability” of the PPP project. Feasibility studies of education sector PPPs must attend to this issue.

Irrespective of the procurement model adopted (PPP vs. traditional purchase), a national program of investment in education infrastructure must take into account the country’s fiscal position. In the early phases of the introduction of PPPs worldwide, governments were tempted to regard the application of the PPP methodology as a convenient way to bypass public sector debt and other fiscal constraints, particularly in economies that were being closely monitored by the International Monetary Fund. The extent to which a PPP project might, in central accounting terms, be

on or off the national balance sheet has often been seen as a major argument in favor of the model. Although there is still no absolutely clear-cut position on where PPPs stand in terms of the public sector accounts, in certain jurisdictions, such as the European Union, criteria relating to the relative balance of risk between the public and private sector have been applied to determine whether the risk has remained with the public sector (on the national balance sheet) or has been transferred to the private sector (off the national balance sheet).

To a large extent, the crucial question has focused on whether the government would have to make the expenditure anyway and had made provision to do so, in which case the prime criterion was value for money, or how to spend resources more efficiently without prejudice to the ultimate service provided to the taxpayer. If the government was struggling to find the resources in the first place, then the issue becomes one of affordability, in which case private parties will rightly approach the procurement with great caution, based on their perception of the government’s ability to meet its long-term obligations.

A prime benefit to the public sector is that, under a PPP contract based on availability or provision of services (rather than upon completion of a physical asset), no payments are made until the service or asset become available to meet the requirements specified by the public sector. The up-front capital outlays usually associated with a traditional procurement, in which the public sector pays for the construction as it is undertaken, are now rolled up into a series of quarterly, semi-annual, or annual payments to the private consortium as remuneration for the availability or performance of contractually defined services meeting specified performance criteria. By definition, no payments are made until the service becomes available, which can occur only after the underlying asset has been completed. Under such a scenario, the private sector must raise the funding to cover construction, working capital, finance costs, and so on. In

net-present-value terms, and depending on the discount rate applied, the benefit to the public sector will be significant, because payments begin only at the end of the construction period. Removing the public sector's obligation to make staged payments relating to construction is one of the key drivers in any net-present-value, value-for-money calculation.

As indicated elsewhere in this report, the ability of the private developer to raise the financing required for the project will depend heavily on several factors, notably:

- The reliability and affordability of the public sector's obligations to make payments under the PPP contract over the long term
- The banking sector's perception of the private developer's ability to meet his contractual obligations to the satisfaction of the contracting authority
- In certain cases, the track record of the developer, and his consortium partners, to raise finance for projects of this kind.

Overall, the financing structure contemplated under PPP can be generically referred to as "project financing," in so far as the private sector will seek to raise finance for the construction and working capital on the basis of its interest in the land, which will have been transferred to it for the purposes of the project, as well as through assignment of the revenue stream derived from the MoE for services rendered or availability of assets.

Barbados

Economic analyses consulted at the time of the study expressed concern about the impact of construction projects on the island's foreign-exchange reserves, given the fact that Barbados imports as much as 70 percent of the raw materials required for any civil construction project. Irrespective of the procurement modality adopted for the construction of schools, this is clearly a factor to be borne in mind at a time of significant fiscal stringency on the island.

Jamaica

Fiscal constraints in Jamaica are significant, and the extent to which future PPP contracts are considered to be either public debt or current expenditure will need to be resolved. At the time of the study, the government deemed that its fiscal limitations precluded the capital investment in the education sector that would be necessary to meet its Vision 2030 targets. However, optimism was expressed about the ability of the government to meet future commitments out of current expenditure.

In discussions held with multilateral institutions, a leading accountancy firm operating in Jamaica expressed the view that savings could be found in the MoE's current expenditure budget that could be passed through NET should the latter be the contracting agency under PPP agreements.

Trinidad & Tobago

As with Barbados and Jamaica, a determination of the ability of Trinidad and Tobago's budget to bear the financial impact of a PPP program is an essential step in the preparation of any PPP project or program for school construction, renovation, or maintenance. Without such a prior determination, the private sector may lack confidence that the public sector will be able to meet its long-term obligations.

PPP financing structures and the capital markets

Crucial to successful funding of PPP-style projects in any jurisdiction is the ability of the banking sector to do the necessary analysis of a PPP project's risk matrix. The objective should be to avoid the need for explicit guarantees from the government. One of the benefits of a move toward PPP-style procurement is the realignment of the relationship between the contracting authority and the banking sector. As noted, the economic viability of the PPP contract rests on the ability of the winning investment consortium to deliver the services and outputs as defined in the PPP contract. Payments by the contracting authority

to the private partner are directly linked to the latter's performance against contractually pre-established criteria. It is in the interest not only of the contracting authority, but even more vitally of the funding banks, that the private contractor be able to assume the risks inherent in the contract and to deliver the services as specified. From the point of view of the contracting authority, the PPP contract essentially establishes that it pays only for what it gets: substandard performance leads to deductions, which in turn jeopardize the SPV's ability to pay off the debt it incurred to fund the project. To this extent, the banking sector's due diligence analysis of the private contractor and of the contractual arrangements entered into by the two parties provides confidence to the public sector that the contractual relationship is viable over time.

Figure 3 presents a typical PPP contractual and financing structure under the U.K.'s PFI program or its derivative models. In countries such as Barbados, Jamaica, and Trinidad and Tobago the equity share of financing is likely to be closer to 30 percent than the 10 percent shown in the figure.

Barbados

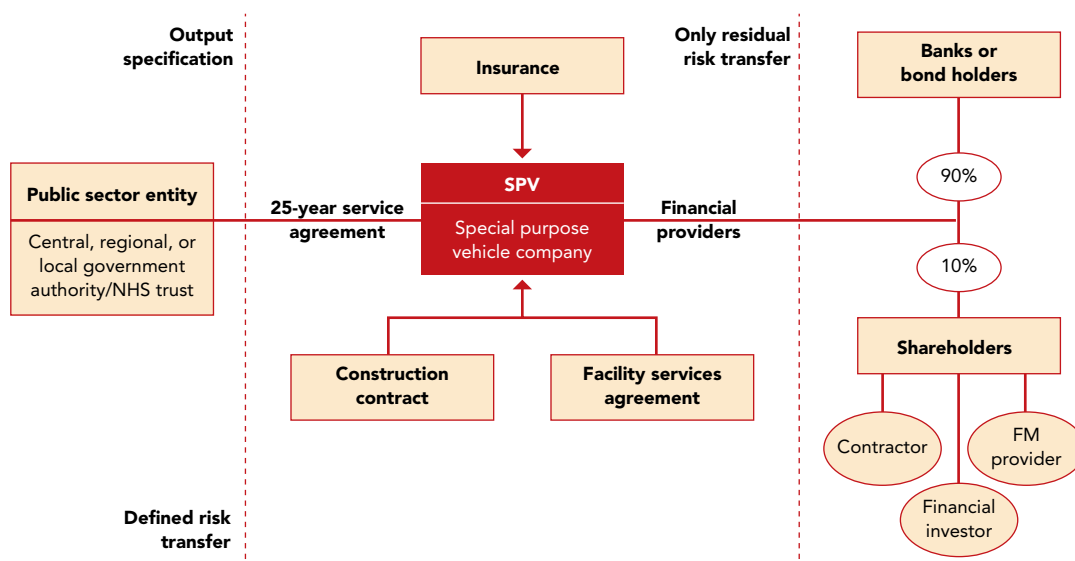
The issue of the service provider's access to equity needs to be borne in mind. At the time of the study, various financial parties commented on the general reluctance of the private sector to put up equity for projects. Because the civil engineering and construction sector in Barbados is small, the issue of "competitive tension" at the time of the tender will require careful management to ensure that the public sector does not end up with just one bidder.

Given the scale of any PPP project that the local banking sector might be called upon to finance, the sums involved should not pose a problem. The ability of various institutions to analyze and manage project risks will vary, although in today's international markets, any skills not available on the island can usually be found abroad.

Jamaica

Jamaica's engineering and construction sector is not short of companies. Of these, the banking community considers some to have the financial muscle needed for a PPP, including the local subsidiaries of

FIGURE 3.
Classic PPP contractual and financing structure



international engineering and construction groups such as Bechtel (United States) and Vinci (France). Some have already been involved in major infrastructure concessions on the island.

One of the many considerations in analyzing a country's readiness for PPP-style procurement relates to the depth of its financial market. The concept of depth relates not only to the overall funding capacity of the banking market, but also to the availability of long-term financing suitable for concession-style deals with a payback period ranging over 20–30 years. A tenor of 7–10 years (with a grace period of 18–24 months) appears to be the maximum maturity with which the Jamaican banking market feels comfortable, whereas the bond market might extend the term to 15 years.

The local market is known to use a so-called mini-perm financing structure, a short-term instrument typically used to pay off income-producing construction of commercial or multi-family properties, usually payable in three to five years, bridging the gap until the property can qualify for permanent financing. This mechanism is prevalent in the property market, particularly in hotel construction. At the time of the study, respondents saw it as one possible approach to PPP funding of infrastructure in education.

Discussion at the time of the study focused on the extent to which the Central Bank of Jamaica would recognize either a lease or cash flow as sufficient security. This crucial issue would require clarification, since the growth of a PPP lending market would need to be assessed in terms of its impact on ratio limits laid down by the Central Bank. In discussion with one of the leading accountancy firms, the view was expressed that the Central Bank was increasingly interested in seeing a move to cash flow–based lending.

In institutional terms, in addition to the presence of national banks such as National Commercial Bank of Jamaica, several large international financial institutions

are represented in the country—among them Citibank, Scotia Bank, HSBC, and Deutsche Bank.

At the time of the study, institutional funds, such as pension funds and insurance companies, had yet to play a major part in the funding of concessions and other PPPs. A large part of the Jamaican banking sector, predictably, focuses on safer lending activities such as credit cards and mortgages, although its experience in the tourism sector should provide a certain measure of valid and relevant experience, particularly as it relates to risks associated with the design and construction of special-purpose buildings. Although certain transactions, particularly in the energy sector, have been conducted on a “project financing” basis, most lending to the private sector is conducted on a “corporate finance” basis.

Trinidad & Tobago

The banking market of Trinidad and Tobago was estimated by study respondents to be capable of funding projects of up to US\$500 million.⁶ As in Jamaica, 15 years appeared to be the maximum maturity tolerated by the local banking market for financing denominated in U.S. dollars, with a period of perhaps only 10 years for financing in local currency. This reflects the fact that institutional funds, such as pension funds and insurance companies, have yet to play a major part in the funding of this kind of investment. A large part of Trinidad and Tobago's banking sector, as in Jamaica, focuses on lower-risk funding relating to credit cards and mortgages, although its experience with tourism should provide relevant experience with the risks associated with the design and construction of special-purpose buildings. Although certain transactions, particularly in the energy sector, have been conducted on a “project financing” basis, most lending to the private sector is conducted on a “corporate finance” basis.

6. Reference was made to a US\$250–300 million bond issue placed in the local market.

As in the case of Jamaica, Trinidad and Tobago's engineering and construction sector has a number of companies considered by bankers to have the balance sheet strength required for PPP deals, including local subsidiaries of major offshore engineering and construction groups. Although some of these companies have already been involved in major infrastructure concessions, study respondents in the private sector expressed concern about the ability of the public sector to run a complex procurement process.

Because, in certain markets, financial institutions can be significant equity participants, it is worth noting that certain financial institutions in Trinidad and Tobago have put in place project-specific SPCs, that can act as real estate developers. Republic Bank, for example, has a facilities management unit focusing on government buildings. The same approach might be taken in education, since at the very least it indicates an ability to put together a real estate development consortium and to manage building projects.

A project-based PPP approach: How to get there

A government's decision to pursue PPPs in most cases must be a strategic one, given the commitment of human and financial resources required to implement the approach across several sectors.

Barbados

Projects in Barbados are relatively limited, which militates against the kind of wide-ranging institutional and policy initiatives that have already been adopted in Jamaica or Trinidad and Tobago. The establishment of a dedicated PPP unit and the progressive underpinning of its activities through legal, regulatory, and other reforms appear unwarranted at this stage in Barbados, a view that, at the time of the study, seemed to be shared in certain quarters of the public sector.

The study concluded that a "project-driven" advisory model should be developed in place of a more

permanent institutional arrangement such as a PPP unit. The necessary advisory support might come through the IDB system, perhaps on the basis of technical assistance funded by the IDB's Multilateral Investment Fund.⁷

As a first step toward the adoption of such a model, the METI would need first to decide which projects to address. Then, on the basis of preliminary suitability criteria, it would have to determine that they could generate value for money and would be affordable in the sense discussed above (that is, in terms of the government's ability to meet its long-term commitments under the PPP contract). Once these hurdles were cleared, education infrastructure specialists would have to be assembled to address the technical, financial, and legal issues implied by a PPP-style procurement. Funding would have to be found to cover the expense of the necessary advisors, terms of reference drafted, and the selection made.

The work contemplated above could be covered by preliminary technical assistance, which could move hand-in-hand with and contribute to awareness-building. Once this initial phase had been completed, the METI, supported by a team of transaction advisors, would build the internal capacity needed to manage the process. The establishment of a working group that brought in experience and expertise from other institutions (such as the PIU and the Ministry of Transport and Works) would be an essential first step.

The government of Barbados continues to prepare the local environment for the use of PPPs where practical. But in view of the perceived difficulty of realizing appreciable benefits through PPPs in education in particular, no PPP initiatives are currently being planned for this sector.

7. Discussions are under way in the Caribbean region about the possible establishment of a dedicated PPP support capacity involving multilateral financial institutions, including the Caribbean Development Bank, the World Bank, and the IDB.

Jamaica

As noted, the public policy groundwork and institutional architecture for the management of PPP projects was established in 2012, with the adoption of “Shaping New Partnerships for National Development,” and it appeared that the education sector would be the first step along the PPP learning curve. Nevertheless, the novelty and challenges of the PPP model implied that a significant degree of institutional strengthening and capacity building would be necessary to ensure that the MoE and the NET would be able to play their full part in project development and postcontract management.

After the study was completed in 2013, the DBJ received a request to develop schools through PPPs (both new and refurbished). The project ideas are currently under review. Aspects being examined include the need for better assessment of real supply and demand, as well as the fiscal affordability of new schools for the MoE. Subject to land availability and budgets, as well as confirmation of value for money, expansions and upgrade projects may well proceed to the procurement stage.

Trinidad & Tobago

Performance-based contracting is not new in the Trinidad and Tobago, but designing projects under such a contractual model requires an understanding of its implications at the level of the procuring authority and at the level of the private parties that might be interested in bidding for such contracts.

The key stages in the process of infrastructure investment—project identification, evaluation, selection, development, procurement and, long-term management—have already been incorporated into key documents underlying the May 2012 Cabinet Minute that outlined the government’s PPP policy.

The MoE’s focus is expected to be on early childhood and primary education, areas in which unit investment values are usually below the optimal level

for PPPs. For individual projects, particularly in the early stages of an incipient PPP program, the impact of the transaction costs (including the recruitment of external advisors—financial, legal, technical, and other), as well as the administrative costs of a full-scale public procurement process on the PPP model, will need to be assessed. The public sector’s transaction costs (that is, its investment in the preparation of the procurement) should be limited to an appropriate level—often seen as 2–3 percent of the contemplated investment.

As indicated earlier, any bundling approach should logically be based on a geographical and social rationale. Thus, the definition of a bundle of projects presupposes a prior process of analysis and consultation with relevant stakeholders. The identification of a geographically and technically suitable bundle of schools projects would then need to be accompanied by a parallel market analysis of design, construction, operation, and maintenance capability for that area, with particular reference to the capacities of available subcontractors.

This work would need to be undertaken on the basis of collaboration between the appropriate procurement and project teams at the level of the MoE and EFCL.

The IDB’s Multilateral Investment Fund and Compete Caribbean are currently supporting the government in financing and implementing two pilot PPPs. One involves the construction and maintenance of 10 primary schools and 10 early education centers. International consultants have been contracted to develop the business case for this PPP and are working with a team made up of the Ministry of Finance and the Economy, the MoE, and the EFCL. The decision to test the PPP model in delivery of school buildings was influenced by the high cost of repairs presently incurred by government. It is expected that the PPP tender will be presented to the market in the second quarter of 2015.

Conclusions

The study conducted during 2012 and 2013 concluded that the PPP model has significant potential for the procurement of educational infrastructure and underlying services in all three target countries, albeit on a much smaller scale in Barbados. At the time of the study, important preliminary steps had been taken in both Jamaica and Trinidad and Tobago to adopt the PPP procurement modality as an option in the provision of infrastructure and services, and preliminary institutional arrangements had been put in place to manage the process on a broad front (including education). Significant support for this initiative had been provided in both cases by the IDB through the Multilateral Investment Fund.

Because relatively few projects are likely to be suitable for a PPP approach in Barbados, the study considered that, once a decision had been taken to move forward, project-specific technical assistance should be contemplated, including the procurement of external legal, financial, and technical advisory services to prepare the project.

The existing legal and regulatory context in all three of the common-law countries was considered to be sufficient, reinforced in Jamaica and Trinidad and Tobago by specific policy statements adopting the PPP procurement modality. In all three jurisdictions, however, concerns were expressed about the historical record of public sector procurement and about efforts to improve procurement practice.

Schools represent relatively low investments, which means that the ratio between transaction costs and final investment, both for the public sector and for private bidders, will in most cases require the batching or bundling of a group of facilities into a single tender in order to obtain economies of scale for all parties.

The study predicted that the novelty of the PPP procurement method and the “limited recourse” nature of the contractual relationship would constitute an important challenge for the local banking markets

that might be asked to support bidding groups. The necessary expertise does exist, however, in the London and New York offices of international banking groups likely to be interested in this type of funding.

Since the date of the study, it is worth noting that significant progress has been made by the government of Trinidad and Tobago in the adoption of the PPP methodology for the procurement of 10 early childhood centers and 10 primary schools.

Barbados

Current fiscal constraints at the time of the study had stimulated interest in mobilizing private sector finance for education sector infrastructure, hence the potential interest in the PPP approach.

Some study respondents in the public sector pointed to the need for a better understanding of PPPs among high government officials, along with a clear map of the institutional and legal/regulatory path to follow to bring PPPs to fruition. The study suggested that the small size of the Barbados economy militated against the adoption of the kind of institutional structure currently being implemented in Jamaica and Trinidad and Tobago. Instead, serious consideration should be given to project-specific technical assistance, as described in the previous section.

The delivery of a PPP model for education infrastructure would, in the case of Barbados, and contrary to the current arrangements in Jamaica or Trinidad and Tobago, rest essentially upon the contracting of external transaction advisors to work in support of the government team on a project-by-project basis. Such an approach would carry the additional benefit that, in the event the preliminary technical assistance failed to demonstrate the merits of a full-scale PPP procurement strategy, the process could be halted without incurring additional costs.

Given the central roles of the METI, the Ministry of Finance and Economic Affairs, Central Purchasing Department, and Ministry of Transport and Works, a

“project specific” procurement modality would need to create a coordination structure backed up by a project working group to interact with the outside experts hired to support the project. The design of such a coordinating structure should form part of the evaluation of the merits of PPPs as part of a wider public procurement policy.

Although study respondents generally agreed that it was unnecessary to contemplate PPP-specific legislation, most recognized that a review and strengthening of the procurement procedures applicable in Barbados might be necessary to facilitate, not only PPPs, but also more traditional kinds of project procurement. At the time of the study, such a process was ongoing with support from the IADB.

The Barbados banking market, while potentially in need of capacity building and strengthening in the areas of project financing, risk evaluation, and more complex PPP-style arrangements, nevertheless should be able to meet the funding requirements of individual projects of the size contemplated under a multi-project approach—that is to say a project on the order of US\$10–20 million.

Concerns about the PPP procurement model expressed at various levels of the government implied that, as a first step, activities should be designed to enhance the level of understanding of, and commitment to, the PPP model across the public sector and the executive. Such activities might include inward or outward missions involving key figures, to present (or to visit) successful PPP programs in comparable jurisdictions. Only when an appropriate level of government commitment had been secured would it be possible to move in the direction of project-specific actions.

The number of potential PPP projects in the education sector is limited, as are the overall infrastructure investments that Barbados will make in the coming years. However, given the emphasis on the role of the private sector and the adoption of PPP contractual modalities in parallel technical assistance programs in

the area of climate change, it is clear that PPPs need to be assessed on a multi-sector basis. In other jurisdictions, the mainstreaming of PPP capacity throughout the public sector has been demonstrated⁸ to bring significant benefits, even in the context of more traditional procurement methodologies.

Jamaica

The government of Jamaica has explicitly endorsed the PPP procurement option as part of its strategic response to the infrastructure challenge and the DBJ has received a request to develop new (“greenfield”) and refurbished (“brownfield”) schools through PPPs. That request is still under review, and the business case (prefeasibility study) for the project has not yet been developed.

A better supply and demand assessment appears to be necessary for the greenfield schools to determine, for example, whether projected pupil numbers exceed the current supply of school places and whether some existing schools are half-empty because they are unpopular or because they lie in areas where the number of school-age children is dwindling). Similarly, it remains to be determined whether the government of Jamaica has made sufficient budgetary provision for the greenfield schools. The PPP model appears to be appropriate for the expansion of existing school infrastructure where land space is available, provided that the value-for-money case is satisfactorily made and budgetary provisions are made for the project.

The ample potential for the development of new educational infrastructure (particularly secondary schools) and for the rehabilitation and upgrading of existing infrastructure is widely recognized within the MoE, as is the role of NET in executing the necessary measures. At the time of the study, the challenge was expected to be the identification, evaluation, selection, and implementation of pilot projects. An

8. Fondo Nacional de Infraestructura (Fonadin), Mexico in <http://public-private-partnerships.worldfinance.com/ppps-in-México/>.

education sector PPP working group bringing together the PPP unit of the DBJ, the PPP node of the Ministry of Finance and Planning, the MoE, and NET was, at study time, developing a business case for 10–12 schools.

Given that the investment size of individual schools at the primary and secondary levels falls below the figure usually believed to attract private sector interest in a PPP, consideration should be given to designing the first tender on a multi-project basis, assembling a bundle of schools (perhaps a mixture of new construction and refurbishment) to arrive at a total project value of the order of US\$20 million.

On the legal and regulatory front, the study respondents believed PPP-specific legislation to be unnecessary, though it was generally recognized that general procurement procedures applicable in Jamaica should be reviewed and strengthened in order to facilitate, not only PPPs, but also other types of projects. As in Barbados, this process was under way at the time of the study.

The Jamaican banking market, while in need of capacity building and strengthening in the areas of project finance, project risk evaluation, and complex PPP-style arrangements, nevertheless should be able to meet the funding requirements of individual projects of the size contemplated under a multi-project approach.

Trinidad & Tobago

Requirements for new construction and refurbishment are great enough to justify the government's decision to examine all appropriate procurement options, one of the principal objectives being the timely and cost-effective delivery of new schools. Historically, Trinidad and Tobago has had sufficient fiscal revenue to meet its infrastructure requirements, but recent stringency has prompted the examination of procurement modalities with a view to obtaining greater value for money. The opportunity to shift the funding of

large-scale projects to the private sector is one of the benefits of the PPP format.

Having explicitly endorsed the PPP procurement option as part of its strategic response to the infrastructure challenge, the government has included 20 education projects in its shortlist of PPP priorities.

Although the overall scale of investment in education infrastructure is several hundred million U.S. dollars, the challenge lies in the relatively low value of individual projects, which could not only multiply the costs of project preparation, but also lead to market fragmentation and other inefficiencies.

With a PPP unit having been established in the Ministry of Finance and Economics in 2011, consideration should now be given to designing a PPP execution team that includes the MoE and, potentially, the EFCL, to consider bundles of pre- and primary schools for a tender on the PPP model.⁹

The PPP option is now regarded as part of the government's overall infrastructure delivery strategy. Legal and regulatory attention should focus on strengthening the procurement process. The role ascribed to the PPP model in any reform of the procurement laws and regulations will be crucial. At the time of this writing (mid-2014), a draft procurement law making specific reference to the PPP model was close to parliamentary approval.

The characteristics of the banking market in Trinidad and Tobago are similar to those of Jamaica.

General conclusions

The principal building blocks necessary for the application of a PPP procurement approach to education infrastructure are rapidly coming together. Demand is strong for an efficient method for building, renovating, and maintaining schools, and international experience

9. This has now happened with the launch of the first education sector PPP program—"Consultancy to Provide Phase 1 Advisory Services for the Development of a PPP Initial Business Case for Ten Government Primary Schools and Ten Government Early Childhood Care and Education Centres."

has demonstrated that the PPP approach works in such a context. However, by virtue of its novelty and complexity, the PPP model will require a significant degree of institutional strengthening and capacity building to ensure that ministries can play their part, not only in project development and procurement, but also in the post-contract management phase, on which so much of the success of a PPP depends.

References

- PPIAF (Public-Private Infrastructure Advisory Facility). 2014. *Caribbean Infrastructure PPP Roadmap*. Washington, DC: World Bank Group.
- Livingston, Nicholas. 2013. "Support for the Development of Public-Private Partnerships for School Infrastructure in the Caribbean." Paper presented at the Inter-American Bank's workshop on Learning in the 21st Century Schools, March 11–15, Montego Bay, Jamaica.



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