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PURSE PROJECT

Private Participation in Urban Services

FINANCING ENVIRONMENTAL INFRASTRUCTURE

Identification and Analysis : Credit Support and Financial Guarantee Options

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Financing Urban Environmental Infrastructure

Identification and Analysis of Credit Support and Financial Guarantee Options

by C. Mark Williams, Urban Economics Advisor

Introduction: PPP/BOT Environmental Infrastructure Projects

In the coming years, an increasing number of environmental infrastructure projects in Indonesia will be developed by private sector consortia through concessions granted by a regional or local government entity. The private party will typically accept responsibility for the financing, design, construction and operation of the project. Often the project will be developed as a public private partnership (PPP) under the build, operate and transfer concept (BOT), where the ownership of the project will be transferred back to the government after the term of the agreement has expired. A few of these PPP projects may also be developed under the build, own and operate concept (BOO), where the private sector consortium will own and operate the project indefinitely.

Most PPP/BOT environmental infrastructure projects in Indonesia will need to be financed with medium to long term loans or bonds supported by a substantial owner equity contribution (usually around 25%). The financial institutions (commercial banks, insurance companies, and pension funds -- or "lenders") that make direct loans and/or purchase bonds for those projects will need to be convinced that the economic viability of the project is reasonably assured. They will want to know that their loans and/or bonds will be repaid in a timely and orderly fashion. In the case of some typical projects like bulk water supply, a local government entity (such as a PDAM) will be the primary customer for the water being delivered and sold by the BOT project.

In this case, the PDAM will purchase water from the BOT project in accordance with the terms and conditions of a 'Take or Pay' water supply contract, in which the minimum amount and price of the water to be purchased by the PDAM is specified. Usually, lenders will want assurance that the PDAM has the financial capacity to make good on the provisions of the 'take or pay' contract, especially the minimum (or 'base') payment. In addition, the lenders will want covenants (contract provisions) that they can implement in the event that the PDAM is unable or unwilling to meet its contractual financial obligations under the take or pay contract, or in the event of *force majeure*. *Force majeure* is generally defined as serious problems that impair the financial viability of the project and are not within the control of the private consortium.

Objective: Define and Discuss Credit Support and Financial Guarantee Issues

This paper will focus on the mechanics of 'take or pay' contract provisions that may be needed and/or required by lenders in order to provide added protection against the risks of either non-payment by the PDAM or *force majeure*. It looks at several of the important issues raised by such agreements and discusses how an appropriate ratio of risk sharing with the private party might be achieved. In other words, what happens if the PDAM does not meet its financial obligations because it lacks adequate revenues to pay for the water it has contracted to purchase? Or if it refuses to pay because of a dispute with the BOT project company? What if the private party cannot supply water because of a natural disaster, or because the water supply was heavily contaminated by a third party not under the control of either the private party or the PDAM? In each of these situations, the project and the lenders are hurt through the actions of other parties over whom they have no control or authority. Under such conditions, what do the lenders do?

The 'take or pay' contract provisions that provide lenders with water purchase commitments, and also protect them against problems such as non-payment or *force majeure,* are known as 'credit support' provisions. Credit support generally refers to all contract financial provisions that give assurance that funds needed to repay lenders will be made available. For the type of BOT bulk water project that we have been discussing, the 'primary' source of credit support is the PDAM, or the institution responsible for purchasing the water delivered by the BOT project. Just as importantly, there are secondary sources of credit support that stand behind the primary PDAM 'take or pay' contract provisions that require additional financial payments during events of non-compliance by government or *force majeure*.

What is the Rationale for Credit Support? Should Government Provide It?

When confronted with PPP/BOT projects for the first time, many government officials believe that the private sector automatically assumes all project risks and that government can ignore risk issues. But what if problems develop that are not under the control of the private sector? Can the private sector be charged with the responsibility to resolve a problem if they have no control over the solution? Should they have to pay for a problem that was created by a new government regulation or by government's inability to enforce environmental laws?

Under ideal circumstances, government could transfer all of the project risk to the private party, but only if the private party and the BOT project were free of government regulations that put the private party at risk. If a new tariff structure, for example, is set by local government and tariff rates are not high enough to provide adequate cash flow to the BOT project, should the private sector be responsible to fund deficits? Or, if the source of water for the project is owned or controlled by government (as it is in Indonesia), should the private sector also bear the consequences if a third party contaminates the aquifer or

river? Under these circumstances, the private party would probably be at the mercy of government if it needed an alternative source for raw water supply. If you were a bondholder, could you accept this risk? Conversely, should government be responsible for costs resulting from errors of judgement or incompetence by the private sector? If there are huge cost overruns due to private party management errors, or if the BOT project does not operate efficiently, should government be liable if it were not responsible for construction or operations? In all of these cases the answer is generally "no".

From a practical standpoint, it is virtually impossible for any government to completely delegate its authority over water rights. Water is a basic human need and government has the responsibility and the obligation to provide access to water for its citizens. Therefore, government has to impose regulations over water use, especially those systems that serve large urban centers where water availability and resource management is a major environmental, health and political issue. However, if those same regulations impose unreasonable or uncontrollable risks on the BOT project, the private sector and, most importantly, the lenders must have assurances that government will ultimately accept responsibility if risks imposed by regulation impact adversely on the project.

This issue is especially important to lenders (bondholders), because they are the most vulnerable party if a project defaults on its financial obligations. Since government regulatory and legal requirements increase the risks of the project, those risks must be carefully analyzed, and government must be prepared to accept some risk sharing with the private party. Most likely, financing approvals from both domestic and (especially) international lenders will necessitate that government or credit worthy private insurance guarantees remove legal and regulatory risk barriers that the private sector cannot assess or control. The primary objective, then, in risk sharing between government and the private sector is one of fairness.

Why is Credit Support Needed in Addition to the Commitment of the PDAM?

Lenders need to have a process to resolve disputes that impact on the BOT project's ability provide adequate cash flow to maintain repayment of debt obligations. For instance, if the private consortium that manages the project is incapable of building, operating or maintaining the project, the lenders have rights under a loan or bond indenture agreement to take control of the project and install new management. However, if government defaults, the lenders may not feel that they have an acceptable recourse to address problems, since commercial laws and judicial processes in Indonesia are not yet adequate to resolve commercial disputes. Lenders will require some mechanism or process that resolves disputes and gives them a reasonable means of protecting their interests.

How Much Credit Support should be Given to the BOT Project by Government?

Either government or private sector guarantees (if available) may be needed to provide insurance against regulatory or *force majeure* risks that the private party cannot assess or

control. However, it is difficult to determine where the line should be drawn to achieve a balance in risk sharing with the private sector. Under no circumstances should government be providing guarantees that protect the private party against normal business risks or inept management of the project.

Examples of Proposed Credit Support from the Umbulan Springs PPP/BOT Project

Within the past two years, a private sector consortium conducted negotiations with central and local government officials for a PPP/BOT bulk water supply project near Surabaya. CS First Boston Singapore, a Swiss/American investment banking firm specializing in project finance, was asked to undertake a financial analysis of the proposed project near the end of the negotiation process. Upon completion of their analysis, First Boston concluded that, from their perspective, there were two important problems with the agreement. They felt that the issues related to 'risk allocation' and 'financial guarantee/credit support' were not well defined or delineated. In other words, they were inadequate.

The 'financial guarantee/credit support' issue between the local government, the central government and the private party was one of the major problems facing the Umbulan project. Primarily, this issue centered on exchange rates, floating interest rates and refinancing risk (also known as liquidity risk). The private party proposed that the project be financed with floating interest rates (based on US dollar interest rates) with the local government agreeing to increase their water tariffs if interest rates increased or if the value of the Rupiah fell against the US dollar. In addition, the local government would have been responsible for guaranteeing any unexpected costs for refinancing the project, should that be required. The local government appropriately refused to accept these risks, which could have imposed an extraordinary cost burden on the government and citizens.

Although there were short term benefits to government under this type of financing structure, there were also considerable risks in the long run, all which were to be guaranteed by government. These three issues were not properly resolved by government and the private developers of the Umbulan project. The private sector should have looked for alternatives that reduced the risk of government. First Boston correctly believed that these issues could only be resolved by obtaining a soverign financial guarantee on the project debt from the Ministry of Finance (MOF). The MOF refused to provide this guarantee. This decision was correct because the MOF would have assumed project risks over which they had little or no control, and might have set a precedent where the MOF began to guarantee many projects that they could not adequately assess.

The second major issue for Umbulan was 'risk allocation'. Since government controls and owns the water supply, it has significant control over the quantity and quality of water used by the project. The private sector has very little control over these factors, so government must assume much of the BOT project risk regarding water supply and the quality of water obtained before treatment. For instance, if an industrial polluter contaminates water that is used for the BOT project, the BOT project owners would have no control over the industrial polluters. However government would have control through

legal and regulatory policies, and enforcement powers. Therefore, it should be the government which accepts responsibility for this type of risk. The BOT project lenders would not be willing to accept this risk, because they refuse to accept risk for potential problems over which they have little or no control. The BOT project private party should only be held responsible if they themselves caused or allowed the contamination of the water as a result of their own inappropriate actions.

For the Umbulan Springs project, the *force majeure* issues also needed to be defined. The private sector cannot be responsible for most of the legal and regulatory issues that are outside their control. For instance, if the source of water dried up, the private party would have little authority to seek and obtain other sources of water. If an earthquake destroyed part of their facility and earthquakes could not be insured through private insurance, the private party could not be held accountable for non-delivery of water. The private party, and more importantly the lenders of project funds, would be taking on too much risk if they accepted full accountability for the risk allocation issues, since they have the ability to lend their funds to other projects where these issues can be resolved to their satisfaction. Lenders and private project sponsors will both accept private insurance guarantees from reptuable insurance companies in lieu of government guarantees, however there are some *force majeure* issues that private insurance companies cannot and will not insure.

The negotiations regarding the proposed Umbulan Springs project provided information that is useful in identifying many of the important risk allocation and financial guarantee/credit support issues. These discussions clearly demonstrate the need for the government to develop satisfactory policies and procedures to resolve them fairly and convincingly. The fact that the Umbulan project did not go forward provides ample evidence that the risk allocation and financial guarantee/credit support issues are not yet adequately defined by the Government of Indonesia for the private sector development of environmental infrastructure.

Conclusions

Government policy makers should assume that there will need to be some level of guarantees for environmental infrastructure projects. However, government needs to understand the rationale for these guarantees, and to be certain that it is only providing assurance that risk issues under its control, or *force majeure* problems that cannot be covered by insurance, are provided 'full' government protection. Government should not be guaranteeing the private party a profit should it fail to perform adequately under the agreement to build own and operate a BOT project.

Although government will need to accept some of the risks discussed above, government can protect itself by implementing and enforcing laws and regulations that safeguard it against problems such as groundwater pollution or building on earthquake fault zones. While regulations will not eliminate risk, they can have a major beneficial impact by decreasing the possibility that problems will arise or by minimizing loss to government if they do occur. Government should also grant itself the right to impose monetary and

possible criminal damages on firms or individuals that cause serious problems through neglect or malfeasance.

Policy makers should also develop contingent emergency and dispute resolution mechanisms with private BOT consortiums to ensure that problems can be resolved quickly and efficiently. There should be an incentive to resolve the problem first and deal with issues of blame after service to the public has been restored.

Issues

The following issues will most likely be of great concern to private sector developers and lenders alike:

Legal and Regulatory Risk

Private sector owners and lenders will want protection against changes in laws and regulations that adversely affect project operations or economics. This does not mean that government cannot institute new laws and regulations. However, it means that government must permit some form of compensation to be paid to the project to cover the cost of complying with new laws and regulations for the life of the BOT concession agreement.

Private sector owners and lenders alike will want a mechanism to adjudicate disputes if the local government defaults on BOT take or pay water purchase agreements, or otherwise unfairly interferes with the operation of the project. Since Indonesia's commercial laws are not yet adequate to provide a clear legal framework for resolving disputes against government, there will need to be some provision that provides assurance that monetary costs and penalties can be paid if government is found at fault.[1] This could include a partial financial guarantee where a portion of the debt financing (but not equity) could be guaranteed by the MOF, or where a "comfort letter" similar to the one furnished by the MOF for the Paiton power project could be provided.

Force Majeure Risk

Government will need to provide some comfort against *force majeure* risks to ensure that lenders can be protected from catastrophic events that they cannot control or insure against. These risks will need to be clearly defined, and any government guarantee will need to be legally enforceable and transparent. These risks include among others environmental degradation, natural disasters and problems resulting from civil disturbances. Without this type of guarantee, the ability of the proposed BOT project to access the capital market may be limited, and the project may not be financeable. Of course, government should explore alternative options, including private sector insurance companies that may be willing to

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[1] Dr. Bambang Subianto, Director General of Financial Institutions of the Ministry of Finance has clearly stated that only the Minister of Finance has the authority to provide government financial guarantees or commitments, so any dispute mechanism that provides for the payment of funds must be approved by the Minister of Finance.

accept some *force majeure* risks. More importantly, government policy makers should take into account potential problems that are manmade and develop and implement regulations that minimize the potential for these problems to occur.

Financing Risk

The Government of Indonesia should not attempt to guarantee financing for the proposed BOT project, nor should the GOI guarantee a profit to the private party that will build, own and operate the project. Many historical analyses of Public-Private Partnerships have clearly demonstrated that financial guarantees can actually increase the cost of projects, and cause large financial losses to government without a corresponding increase in the output of the projects or an enhanced benefit to the public.

Government officials may have to consider some options to provide secondary financial support to the first few PPP/BOT projects. Because the BOT process is new to Indonesia, and potential investors do not have an opportunity to study comparable examples, some form of government assistance may be necessary to allow projects to go forward. If government does provide support, the following issues should be discussed and explored in detail.

a) Government should look to a credit worthy private mortgage insurance company to provide credit support for the private financing. In many developed countries around the world, project debt funds can be accessed because debt repayment is guaranteed by a financially strong insurance company.

b) If the GOI believes that some secondary support of debt payment is needed, the Ministry of Finance should consider providing a "comfort letter" similar to the one furnished for the Paiton power generating project. This support gives additional comfort to the project lenders, but does not adversely impact on the sovereign guarantee policy of the GOI. The GOI should only provide support for part of the project debt. This partial guarantee will ensure that the lender has the opportunity to lose money if he misjudges the legal and financial viability of the proposed BOT project.

Next Steps: **The Project and Financial Risk Management System Should Assist in Identifying and Resolving these Risk Allocation and Financial Guarantee/Credit Support Issues**

1. PURSE has proposed that a Project and Financial Risk Management System for PPP projects in Indonesia be developed. Such a system will help the government identify the risk allocation and financial guarantee/credit support issues and other important matters that need to be resolved. This system will ensure that an institutionalized set of clear procedures is developed to support large scale PPP/BOT project development.

The risk management system will identify many of the issues raised in this paper and provide recommendations that will facilitate the development of PPP/BOT infrastructure. At the same time it will help ensure that the GOI does not burden itself with unnecessary risks and large "hidden" financial obligations.

2. Beyond the Project and Financial Risk Management Study, PURSE will assist in the preparation of a new tariff model to ensure fair pricing of water or other environmental services to GOI government agencies.

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THE PURSE PROJECT

In December 1991 the U.S. and Indonesian governments signed an agreement to encourage private investment in the provision of public water supply, wastewater treatment and solid waste management services in urban areas throughout the archipelago. In recognizing that its capacity to finance the needed projects is severely strained, and that insufficient urban infrastructure will adversely affect public health and welfare and inhibit future economic growth, the Government has been looking increasingly to the private sector to participate in the provision of these essential services.

PURSE is working with USAID/Indonesia's Office of Private Enterprise Development and several agencies of the Government of Indonesia through a combination of technical assistance and capacity building interventions to:

- develop policy consensus and a legal framework that clarifies current rules and formulates new or revised regulations pertaining to private investment in all aspects of municipal infrastructure development and/or provision of services.

- demonstrate the technical and contractual feasibility of Build-Own-Operate and Build-Operate-Transfer demonstration projects.

- transfer knowledge and expertise to public sector officials in relevant technical, financial and managerial aspects of environmental infrastructure.

For more information on the PURSE Project, contact Chemonics International or the PURSE Project at the addresses listed above.