6. Government support

6.1 Types of Government Support

Government support to infrastructure projects can take a variety of forms. Key provisions can be divided into two categories. First, the government can provide direct or indirect financial support to the project. This form of support is discussed in this chapter (see box 6.1 for examples of common financial support mechanisms). Second, government support might be needed with respect to the securities and remedies required by lenders. Lenders might, for example, require that the government give them the right to step in and cure any alleged breaches before the concession is terminated or substitute a new company to take over the concession, provided the substitute has the required technical and financial capacity to complete or operate the project. Such support is often critical to make projects bankable and therefore feasible. Lenders' security rights are discussed further in annex 4.

6.2 Rationale and Design Issues

Government financial support can be provided through three basic types of instruments: subsidies, financial investment (debt or equity), or guarantees.[1] This section aims to identify the different cases in which government support is justified and, in each case, which of those three instruments is most appropriate.

Three distinct justifications are commonly presented in favor of government support:

- The existence of uninsurable political risks.
- The assertion that some services should be provided below cost.

Box 6.1 Key Provisions for Government Support of Infrastructure Projects

The main provisions for government support commonly sought by project sponsors include:

- Direct financial contributions, such as grants, loans, equity participations, and asset transfers.
- Exemption from, or reduction of, taxes, royalties and other levies and duties.
- Complementary investments.
- A period of exclusivity.
- The adoption of necessary legislation and the issuance of appropriate approvals and consents for the implementation and operation of the project.
- Guarantees of supply or off-take agreements.
- Exemptions from restrictions on the import and export of all necessary plants and equipment.
- A guarantee of convertibility and transferability of local currency earnings.
- The right to keep foreign currency sale proceeds offshore.
- Compensation if new planning or environmental laws detrimental to the profitability of the project are adopted.
- A guarantee that the project development and operation plan will not be changed without prior consent of the sponsors, except in some narrowly specified circumstances (for example, on the grounds of national security).

Source: Freshfields (1995).

- The assertion that the government has a lower cost of risk bearing than private investors.

6.2.1 First Assertion: The Existence of Uninsurable Political Risks

6.2.1.1 Rationale

Traditional political risks include: the risk of expropriation (nationalization without "just compensation," either by a single act or by a series of measures that amount to "creeping expropriation"); the risk of political violence (war, civil war, terrorism, sabotage, and so on); convertibility and transfer risk (the conversion of local currency into foreign exchange may be impossible because of exchange controls; transfer of foreign currency out of the country may be blocked by the central bank). Such risks—when they are relatively severe—will not be accepted by private investors and are not easily insured in private markets (box 6.2). It is generally accepted that such risks should be borne by the government that directly causes them and is in a better position to control them.

The definition of political risks can, however, extend beyond the traditional political risks described in the paragraph above. Modifications of the legal framework, unfavorable regulatory decisions, and failure by publicly owned enterprises to uphold their obligations to the project can, at least in some cases, also be classified as political risks. The extent to which the government should protect private investors against those risks is, however, a rather difficult issue to settle.

6.2.1.2 Modifications of the legal framework

Whether the government should compensate operators for changes in legislation that adversely affect their activities is a question that has been examined above. As mentioned in section 3.1.3, much will depend either on whether these changes specifically affect the operator or on whether a wide range of businesses are affected in the same general way.

6.2.1.3 Regulatory risk

As far as regulatory risk is concerned, an important issue is the degree of discretion that is granted to regulatory authorities: the issue of government compensation will normally not arise as long as the regulator exercises only the discretion that it has been granted. Only when regulatory rules are specific enough can it be ascertained that a breach—possibly justifying government intervention—has taken place. Another important point is that breaches of regulatory rules by the regulator might have to be dealt with differently according to the identity of the regulator. If regulatory responsibilities have been conferred on an autonomous entity at arm's length from the government, it might be preferable, in order to safeguard the autonomy and authority of that entity, to rely on appeal mechanisms before an independent body (such as a superior court or another ad hoc group of experts) rather than on intervention by the government to compensate private operators.

6.2.1.4 Breach of contract by public enterprises

Much will depend in this case on the degree of effective separation between the government and the publicly owned

Box 6.2 Political Risk Insurance

Investment insurance for political risk is available from a number of national public agencies, multilateral institutions, and the private sector. The first public plan offering inconvertibility coverage to companies investing abroad was established in the United States in 1948. In 1971 the function of providing political risk insurance in the United States was taken over by the Overseas Private Investment Corporation (OPIC). Other national programs include EID/MITI in Japan and Treuarbeit in Germany. The Multilateral Investment Guarantee Agency (MIGA), a member of the World Bank Group, began offering political risk insurance in 1988, and other multilateral institutions, including the International Bank for Reconstruction and Development and the Inter-American Development Bank, now offer political risk guarantees with a government counter-guarantee.

MIGA and most national systems cover risks arising from expropriation, war, civil strife, and currency inconvertibility and nontransferability. In order to be eligible for coverage by a national agency, investors must generally be citizens of that country or a corporation established under that nation's laws. Rules on what types of investments can be covered and the countries for which coverage will be extended vary among agencies. OPIC currently offers coverage in about 140 countries that are judged to observe human rights and workers' rights and have a low per capita income. EID/MITI and Treuarbeit have no restrictions on eligible countries, although Treuarbeit does require the availability of adequate legal protection, such as a bilateral investment treaty with Germany. MIGA coverage is available in the 128 countries that are MIGA members. The maximum term offered by the national agencies and MIGA is about 15-20 years. Exposure limits vary as well: OPIC offers maximum coverage of $200 million per project, while MIGA's limit is $50 million per project. These two public insurers make up the bulk of the market. Investment cover by members of the Berne Union, an association of national credit and investment insurers (which includes the agencies mentioned above and about 40 others representing 34 countries), totaled more than $15 bilion in 1996, with an outstanding portfolio of $44 billion.

In recent years the private market for political risk coverage has grown rapidly. The major players in the industry include the American Insurance Group (AIG) and Lloyds of London. While these insurers can offer a broad range of coverage for different risks, including expropriation and, to a more limited extent, inconvertibility and political violence, the terms and exposures available are usually more limited, and fees can be substantially higher than those of public agencies. Most private insurance coverage is only for one to three years, although AIG now offers a facility with a coverage of ten years.

Note: For more details on the forms of political risk coverage available from American, German, and Japanese public insurers and MIGA see annex 5.
Source: Beme Union and World Bank staff.

enterprise. For corporatized entities with true commercial autonomy, supply or purchase risks are in fact commercial risks, akin to the risks of dealing with a private firm. Commercial risks should normally be borne by the operator (and in some cases transferred to subcontractors or users if the subcontractors are in a better position to bear those risks). The case of the Côte d'Ivoire water lease, concluded before 1987, clearly illustrates the dangers of leaving commercial risks with the government (box 6.3). On the other hand, public enterprises that lack any type of autonomy are much more likely to default because of political interference in their management. Therefore, the more pervasive the government's control of the enterprise, the greater is the case for considering performance risks as political risks. Whether the government should then bear those risks is an issue we discuss in the next section.

6.2.1.5 Appropriate instrument

Governments must determine the most appropriate mechanism for mitigating these political risks. A government guarantee designed to protect investors against specifically identified (political) risks is more appropriate than subsidies or financial investments that do not distinguish between different types of risks. The use of such guarantees is not without its costs, limitations, and trade-offs, however.

First, as it is extremely difficult to determine precisely whether some risks are truly beyond the control of the service provider, sovereign guarantees might end up blunting the operator's incentives.

Second, sovereign guarantees can raise acute problems of moral hazard and adverse selection:

- Since the government knows that if a guarantee is called it can finance the liability through taxation, it might be tempted to adopt too lax an attitude in the granting of such instruments (moral hazard). Therefore, unless it is generally assumed that risks should be borne by taxpayers (we return to this topic in section 6.2.3), guarantees should be granted only if the government is willing and able to deal with the source of risk. This means that political risk guarantees should be granted only when they are complemented by genuine efforts to control risks and attempts to reform the underlying causes that give rise to risks, and only with respect to the behavior of entities that the government is in a position to influence.
- In addition, there is a risk that the party whose behavior is being insured against might actually behave worse knowing that its contracting partner benefits from government protection (moral hazard). Thus guaranteeing the behavior of publicly owned enterprises might conflict with efforts aimed at increasing the autonomy and commercial orientation of such enterprises.
- Also, investors who benefit from the protection conferred by a guarantee might seek out excessively risky projects (adverse selection). For that reason, guarantees should leave beneficiaries somewhat exposed.

Box 6.3 Government Exposure to Commercial Risk in the Pre-1987 Côte d'Ivoire Water Lease

SODECI is an Ivorian company that is 46 percent owned by SAUR, a French water distributor, and 50 percent by private Ivorian investors and employees of SODECI. Another 3 percent is held by the government and 1 percent by private French interests. Since 1974 it has been responsible for supplying water to Abidjan and other urban and rural centers in the country and for operating the sanitation system in Abidjan. Tariffs collected by SODECI were used to pay revenues to SODECI and to finance two publicly administered funds set up to cover debt service payments and investments in water system infrastructure. SODECI was obliged to maintain and operate any additions made to the existing system by the Water Directorate and the Ministry of Public Works and Transports. SODECI was not consulted on investment decisions but was guaranteed compensation if the amount of water actually consumed was less than forecast, thus shifting most of the commercial risks of the project to the government.

While coverage and efficiency of service improved substantially under the lease, the financial situation of the sector progressively deteriorated during the economic crisis that struck the country in the 1980s. Government investment decisions were based on extremely optimistic consumption forecasts and required extensive borrowing. A continued active investment program in the face of the economic downturn led to a large accumulation of public debt and a low capacity utilization rate. SODECI was insulated against the government's poor investment decisions by its contract. When the forecasts failed to materialize, SODECI was compensated for the shortfall in actual water demand. Between 1982 and 1987 SODECI received some $10 million in compensation taken from the sums that should have been allocated to the construction fund. In 1986 the financial crisis was such that no investment could be made. To make up for this shortfall, the government more than doubled tariffs for industrial water supply, thus causing industrial consumption to fall even further. By 1987 the sector had $330 million of cumulative debts from its ambitious public expenditure program. By 1988 it had arrears to SODECI amounting to $24 million.

A new contract was negotiated in 1987 for a 20-year concession under which SODECI's remuneration was reduced and its revenue guarantee canceled. In addition to operation and maintenance, SODECI is now responsible for projecting demand and planning and executing investments in the urban water supply sector. A portion of the tariffs collected by SODECI are assigned to a development fund for social connections, renewal, and extension works to be executed by SODECI, in accordance with a price schedule set out in the contract and with the approval of the Water Directorate. SODECI also has responsibility for submitting plans for new investments to be financed by the government and is responsible for the execution of works totaling less than 80 million CFA Francs. For larger works SODECI is permitted to participate in a competitive bidding process for the construction contract.

Source: Kerf and Smith (1996) and World Bank staff.

Finally, while the central government can provide guarantees against risks related to the behavior of other entities (decentralized political authorities, for example), it cannot meaningfully guarantee its own behavior. To add credibility to the government's original commitment, other instruments are needed, such as governmental performance bonds or guarantees by multilateral institutions counter-guaranteed by the government. Once again, however, as the government can rely on its taxation powers to replenish the performance bond or to fulfill its counter-guarantee obligations, it is necessary to ensure that such instruments support genuine efforts on the part of the government to limit the risk of breach of contract.

6.2.2 Second Assertion: Some Services Should Be Provided Below Costs

6.2.2.1 Rationale

There are three main reasons for pricing infrastructure services below costs. First, the provision of some services might create positive externalities, thereby justifying higher levels of consumption than those that would exist if users had to pay the full cost of services. Second, authorities might want to keep prices equal to marginal costs in an industry characterized by increasing returns to scale (which requires that the firm obtain additional sources of revenues to cover its fixed costs). Third, it might be considered desirable to provide public subsidies to some users. As argued in section 3.3, however, exceptions to the principle of cost-covering tariffs should be rare and narrowly defined, especially in developing countries.

6.2.2.2 Appropriate instrument

In cases where services are indeed priced below cost, government support should take the form of subsidies supplementing the price that users are willing to pay for the service. Subsidies should be provided only for services actually delivered (as in the scheme developed in the Chilean water sector-see box 3.3). Such subsidies directly address the discrepancy between the price that users are ready to pay and the "socially desirable" price. In addition, they fully preserve the incentives for the service provider to perform efficiently.

6.2.3 Third Assertion: The Government Can Bear Risk at Lower Cost

6.2.3.1 Rationale

The argument that the cost of bearing risks is lower for the government (that is, for taxpayers) than for private investors is based, first, on the fact that individuals tend to be risk-averse and, second, on government's supposedly superior ability to pool and to spread risk. By investing in a wide range of different projects with mutually independent outcomes (pooling risks), the government can reduce the overall risk of its portfolio: under-performing projects will tend to be compensated by overperforming ones. The lower risks represented in a government portfolio will be more attractive to risk-averse investors. In addition, by spreading risk over a large number of people (the taxpayers), the government is able to substantially reduce the risk borne by each individual. This is not only because a given amount of risk is divided

among many individuals. It can be demonstrated, in fact, that the sum of the risks borne by all investors will be smaller when the total number of investors is greater (see Arrow and Lind 1970). Once again, such a result will appeal to risk-averse investors.

It is not entirely clear, however, that the government can in fact pool and spread risks better than the private sector.[2] In addition, the above argument overlooks one dimension of the problem: the government has weaker incentives to invest wisely than do private investors. One reason is that, unlike private parties, the government can rely on its taxation powers to raise more capital if its investment decisions prove unwise. Another reason, already mentioned in section 3.1.3, is the fact that civil servants' use of taxpayers' money is usually not as closely and efficiently monitored as the investment decisions of managers of private infrastructure projects.

6.2.3.2 Appropriate instrument

It is therefore very doubtful that, in terms of investment risks, taxpayers are in a better position than private investors and that they should therefore be satisfied with lower returns. If that were the case, however, it would justify paying lower risk-adjusted returns to the government than to private investors for its loans or equity participation in projects. The difference between public and private returns would, of course, make projects in which the government participates more attractive to private investors and lenders. Indeed, with the government requiring low returns, a larger share of total returns would be available to private parties.

Even if justified on the basis of taxpayers' lower cost of risk bearing, risk-sharing arrangements through loans or equity participations by the government are not without drawbacks, as pointed out in section 3.1.3. With equity contributions, the government shares in losses and profits. The fact that it shares in losses will make the project more attractive to risk-averse investors. The fact that those investors also have to share profits might, on the other hand, reduce their incentives to maximize the performance of the company and induce them to exaggerate their costs (thereby reducing the total amount of profits to be shared). With loans, the government shares downside risks without the upside potential (indeed, the returns on debt are fixed; any returns in excess of what is necessary to reimburse lenders goes to equity holders). Private equity holders can therefore limit their risks without limiting potential profits, which might induce them to pursue excessively risky projects.[3]

6.3 Government Contingent Liabilities

Correct valuation of the different types of government support to infrastructure projects is an essential prerequisite to sound management of government exposure. Valuing direct cash subsidies is straightforward. Valuing the subsidy element of a government loan can be done by comparing the price of government loans with the market price of similar loans.

6.3.1 Valuation and Budgeting

The subsidy element of a guarantee can be estimated in the following way: the value of a full credit guarantee (as opposed to a partial risk guarantee covering only certain risks) can be

calculated based on the difference between the interest rate of a risk-free loan and that of a normal market loan. The subsidy element equals that difference minus the guarantee fees (box 6.4).

Most governments, however, fail to treat these types of subsidies coherently in their budgets. Indeed, under a cash-based system of budgeting—which is the most common—only cash outlays are recorded. Therefore, while direct cash subsidies are recorded when they are issued, as they should be, the subsidy elements of loans and guarantees are not properly taken into account. The disbursement of a loan is recorded as a cost equal to the full amount of the loan with subsequent repayments representing offsetting receipts when they are cashed in. As for guarantees, they are simply not recorded as expenses, unless a claim is made in the future. Consequently, the subsidy elements of government loans and guarantees never appear as such. Also, the different forms of government support are treated differently. Policymakers have an incentive to provide guarantees rather than cash subsidies, as they let the fiscal position of the government appear better than it actually is (see Mody and Patro 1995).

Recognizing these problems, the United States changed its budgeting and accounting systems for grants, loans, and guarantees in 1990 in order to record the actual costs of these instruments (see box 6.5). Other countries, such as Canada and New Zealand, have also introduced policies to ensure that guarantees appear in government accounts. New Zealand's Fiscal Responsibility Act of 1994, for example, mandates that the Treasury regularly publish any contingent liabilities of the Crown.

Box 6.4 Value of a Full Credit Guarantee—A Numerical Example

The loan amount, or government contingent liability (that is, amount covered by guarantee), is $100,000.

- The interest rate on a risk-free loan is 5 percent.
- The interest rate on a normal market loan is 10 percent.
- Guarantee fees are $1,000.

The value of the guarantee = 10%($100,000) - 5%($100,000) - $1,000 = $4,000.

Source: World Bank staff.

Box 6.5 The United States Federal Credit Reform Act of 1990

Prompted by an explosion of loan guarantees issued during the 1980s and a recognition of biases created by the simple cash-based system of budgeting, the United States introduced a new system of budgeting for loans and guarantees, established by the 1990 Credit Reform Act. Under this new method of budgeting each form of credit is valued using a financially equivalent metric—the expected present value of future costs. The budgetary cost of credit is defined as the present value of the expected cash outflows from the government minus the expected cash inflows to the government. If borrower fees, repayments, and interest are not sufficient to cover the principal of a direct loan and the Treasury's cost of borrowing, the shortfall is a cost to the government. If guaranteed loan defaults (or interest subsidies) are larger than the fees that borrowers pay to the government, that shortfall is also a cost. These costs, or "subsidies," must compete for budgetary resources on the same basis as other government allocations.

The Credit Reform Act significantly improved the budgeting process in the United States. The issuance of direct loans, guarantees, or grants has the same fiscal implications and requires the same budget discipline. As a result policymakers are able to decide on the form of financial support by looking at the underlying needs of the targeted population rather than on the specific budgetary treatment of alternative financial structures.

Source: Lewis and Mody (1997).

6.3.2 The Institutional Framework

Issues of technical capacity and the ability to resist improper pressure, similar to those discussed in chapter 5, are also relevant here. Indeed, issuing guarantees calls for difficult and technical judgments regarding, for example, the extent of coverage. Also, political authorities and investors promoting specific projects might attempt to unduly influence the process.

There might be substantial advantages, therefore, to adopting solutions similar to those mentioned in chapter 5. Political authorities would retain the responsibility of determining the budget to be relocated to a central guarantee authority. They could also define the types of projects that could benefit from guarantees. But the central guarantee authority, set up at arm's length from sources of improper pressures, would be responsible for issuing guarantees in each case. The members of the authority could be exempted from civil service salary rules in order to attract and retain high-quality staff. A cross-sectoral mandate might further protect staff against pressures from any single investor or sectoral minister with a stake in a particular project. It might also promote the learning and implementation of coherent solutions across sectors. Finally, it would make maximum use of scarce human resources.

6.3.3 Risk Management

The government can use a variety of tools to ensure that its exposure does not grow excessively or that it supports the wrong project:

- In order to keep track of the extent of government exposure, the exact value of the subsidies provided should be revised regularly. The likelihood that a given entity might default on its obligations might vary over time, and this would of course modify the value of government guarantees related to those obligations.
- The government should charge a fee as compensation for the risks it takes and to cover the costs of administering the guarantees. Such fees could rise according to prespecified criteria (such as the downgrading of the guaranteed entity by a rating agency) when the likelihood of default increases.
- If fees are not paid, the government could arrange to seize collateral as compensation.
- Efforts can be made to diversify the overall guarantee portfolio in order to reduce the variance of expected liabilities.
- When the overall portfolio remains correlated with particular variables (the interest rate, for example), the government can purchase appropriate derivatives (such as interest rate derivatives) to hedge its exposure.
- Guarantees should be structured so as to leave the beneficiary with some exposure in order to limit problems of moral hazard.
- In addition to capping the budget of the guarantee authority, the political authorities should put monetary ceilings on total government exposure. Some restrictions might also be put on the use of instruments that severely expose the taxpayer. The types of risks that the government is willing to cover could also be specifically limited. Such rules are often advisable, given the fact that, as discussed in section 3.1.3, government officials decide on the use of tax money rather than their own and might therefore easily abuse the discretionary powers given to them.

Notes

1. Apparently distinct types of support can, in fact, be considered as particular examples of one of these three forms. Complementary investments, such as the rehabilitation of a road leading to a privately concessioned bridge, can be thought of as an in-kind subsidy, for example.
2. The private sector also can pool risks. If the state retains an advantage in this respect because it controls a larger number of diverse projects, that advantage can be transferred to the private sector by privatizing the projects in question. By the same token, large private corporations can also spread risks over a large number of individuals. Those who believe that the government is in a better position to spread risks argue, however, that in order to control a large corporation, some shareholder may hold a large block of stock, which is a significant component of his wealth. Thus from the point of view of such a shareholder, the costs of risk bearing are not negligible, while those costs are negligible for other stockholders. Consequently, in considering prospective investments, the shareholder who controls the company might discount for risk when it is not in the interest of the other stockholders

to do so. This problem, the argument goes, would be avoided in government-controlled companies. This line of reasoning is not completely convincing, however. One can point, for example, to the fact that the major shareholder could be an equity fund itself, consisting of a large number of shareholders, thus spreading the costs of risk bearing over an even greater number of individuals. Also, it is far from clear that bureaucratic managers will be less risk averse than corporate managers.

3. For a detailed discussion of whether governments have a lower cost of risk bearing than investors, see Klein (1996c).