

WIDER

STUDY GROUP SERIES

No. 6

Private Investment in Infrastructure
The Mobilisation of Equity Capital

WORLD INSTITUTE FOR DEVELOPMENT ECONOMICS RESEARCH
OF THE UNITED NATIONS UNIVERSITY

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(A research and training centre of the United Nations University)

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Private Investment in Infrastructure - The Mobilisation of Equity Capital

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WIDER STUDY GROUP REPORT NO. 6
PRIVATE INVESTMENT IN INFRASTRUCTURE
THE MOBILISATION OF EQUITY CAPITAL

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PREFACE

This is the sixth report in the WIDER series of Study Group Reports. Each of these reports has dealt with some aspect of channelling savings from countries where savings have been in surplus (notably Japan) to developing countries and more recently to Eastern Europe. A particularly challenging aspect is that the savings have accrued largely in the private sector in surplus countries and their use is likely to be particularly productive if channelled to the private sector in recipient countries. Moreover, the savings recycling methods of the past, relying predominantly on government guaranteed loan finance, led directly to the debt crisis of the 1980s and new, preferably non-debt creating channels of finance have therefore to be explored.

Savings flows in the global economy and claims upon them are once again undergoing important changes. The preceding report in this series (also by a group chaired by Sir Kenneth Berrill) examined the potential of private portfolio flows into emerging stock markets as one important new type of savings flow in the area of non-debt creating means of finance. This latest report takes a look at one aspect of another type of non-debt creating finance, namely direct investment. It looks more precisely at those investments that might be attracted into infrastructure investments in developing countries and Eastern Europe, including the role which investment insurance arrangements might play in this process. The focus is thus on a subject which has not received attention in the past. The changes in savings patterns now make timely such a look; governments are increasingly interested in attracting the private sector into infrastructure investments and traditional means of external financing -- particularly through bank loans and export credits guaranteed to creditor countries -- are no longer readily available.

I am pleased that WIDER can pioneer in bringing the issues to the attention of policy makers in both developed and developing countries alike. Once again I would like to thank Sir Kenneth Berrill for chairing this group and steering the report to completion.

Lal Jayawardena
Director

INTRODUCTION BY THE CHAIRMAN OF THE GROUP

This report looks at the issues faced by developing countries and those in Eastern Europe in attracting private investment into infrastructure and mobilising external finance for this purpose. This is only one facet of total direct investment flows and the associated transfer of technology but nonetheless it is an important one. Encouraging the private sector to play a part in infrastructure investment is a significant part of the overall transformation process that many countries are undertaking in moving towards private sector oriented development. It is moreover an area which raises quite different issues compared with those involved in privatising productive enterprises in mining, manufacturing and commerce. Because the amounts of finance involved are large, the external financing issues are also especially difficult.

The report first describes the financial context leading governments to move in the direction of encouraging private investors to undertake new infrastructure investments or rehabilitate existing ones. The report then discusses the key issues both from the point of view of investors as well as from the perspective of the government itself. It points also to the importance of contractual undertakings, not just in the context of a shift in government functions from the owner and carrier out of investments to the regulator and specifier of the setting for private investors, but also in the context of mobilising the external financial package. Contractual undertakings help make investments insurable as well as provide the more general assurances about the investment climate that foreign investors need.

In respect of the external financing package there has been a traditional divide between the insurance industry and banking industry reflecting their different approaches to risk. One important development in financial markets in recent years is the looking at the financial services sector as an integrated whole and the fashioning of specific financial instruments for specific risks. Against the background of this general development, this report considers the enhanced role of investment insurance agreements in a financial area that hitherto has been largely the preserve of export credit agencies and banks.

Sir Kenneth Berrill

EXECUTIVE SUMMARY

Background

1. The external financial environment for developing countries and for the countries in Central and Eastern Europe remains difficult, despite signs of progress in dealing with problems of over-indebtedness. This reflects the balance sheet weaknesses of commercial bank lenders as well as diminished support by governments for officially guaranteed export credits.
2. In response both to external financial difficulties as well as in response to continuing strains on domestic public finances, there is a strong motivation for developing country and other governments to look to the private sector to carry out investments in infrastructure which hitherto have been carried out by the state.
3. Infrastructure investment opportunities can attract both domestic private investors and foreign private investors and thus help address both sets of financing difficulties.

The Issues

4. The paper identifies three key issues:
 - There is an interrupted history (in most countries) of private sector investing in and managing infrastructure projects which has created a shortage of natural owners. In addition there is limited capacity in domestic stock markets for raising equity. For both of these reasons, the first key issue is the mobilisation of the equity component of the financing and the putting in place of "logical" ownership arrangements.
 - Even after a logical ownership structure has been established, the circumstances in which private investors will take on all the risks associated with infrastructure investments are rare. A second key issue therefore is how to achieve an appropriate division of risk between the public and private sectors.
 - In view of the reduced availability of sovereign risk commercial loans and export credits, the third key issue is the arranging of the external finance.

Recommendations

5. The recommendations of the paper are addressed to two parties -- host governments and the external community:
 - **Host governments** have a key role in satisfying themselves on the quality of the concession holders so as to achieve a satisfactory ownership structure and must also stand ready to cover certain types of risk in contractual form so that these risks become insurable by the investor.
 - **The external community** has a role in expanding investment insurance arrangements so that they can play an increasingly important role in external financing. In this context the paper recommends that OECD countries should continue to exploit ways in which official and private insurers can work more closely together. Closer cooperation may take the form of arrangements for a greater exchange of information, an expansion of co-insurance and re-insurance arrangements and include exploring the establishment of an investment re-insurance pool supported by both official and private insurers. However, extra capacity will also involve extra capital. Regional development banks could have a new role in this area.

PRIVATE INVESTMENT IN INFRASTRUCTURE

The Mobilisation of Equity Capital

I INTRODUCTION

The governments of many developing countries, as well as those of Central and Eastern Europe, have a strong incentive to bring the private sector (both domestic and foreign) into investment programmes traditionally carried out by the public sector. It is increasingly recognised that a recovery of investment levels in developing countries depends on the private sector playing a larger role than hitherto; that earlier expectations of the benefits from a leading role for the public sector have not been validated by experience and, in any event, cannot be pursued in the light of the strains on public sector finances. Particularly promising, in theory, for transferring from the public sector are investments involving major construction works and major equipment items, for example roads, railways, ports, airports and power stations and those with foreign exchange earning potential.

The financial motivation for governments to turn to the private sector to carry out infrastructure investments comes from two sources. First there is a need to alleviate pressures on domestic government finances. If governments are successful in their objective of bringing in the private sector, they are able to reduce public sector expenditures, the government domestic borrowing requirement and debt service, or alternatively redirect public resources to other objectives. In Eastern Europe in particular, the focus of public expenditures has to switch from the financing of investments to the provision of social security schemes which will provide a safety net alongside the operation of market economies. Secondly, there are the pressures arising on the external financing front. The savings surplus in Germany is no longer available in the same degree for recycling to abroad because of domestic needs. A more cautious attitude to recycling is also evident in Japan. Although problems of over-indebtedness are beginning to recede for some developing countries, commercial banks are still unlikely to wish to increase their exposure to developing countries or to the countries of Central and Eastern Europe given other sources of pressure on their balance sheets (indeed they will probably wish to continue to reduce their exposure to developing countries). In addition, the willingness of developed country governments to provide official support through their export credit agencies has eroded as the full cost of past support becomes clearer in the light of repeated Paris Club reschedulings and because of their desire to

phase out export subsidies. Consequently, developing countries that wish to obtain resources from abroad to supplement their own savings need to attract private equity investment and equity related flows.

Private infrastructure investment opportunities provide one important means for attracting such private equity and equity related flows. Also a shift away from general purpose public sector overseas borrowing secured by sovereign guarantees to a more varied programme of external finance where repayments and return flows can be more closely related to the success of the investments is in the long run interest of both borrowers and creditors. Such investments also give scope for debt reduction through the use of debt/equity swaps.

Nevertheless, despite this compelling motivation, in practice few investments of this sort are actually being carried out. The question is why? A technical reason is the complexity of the structuring of the legal and financial provisions needed. However, apart from technical aspects, there are three fundamental issues that have to be addressed. The first is that equity finance to provide a viable and robust ownership structure is difficult to arrange, in part because natural owners may be missing. Long years of public sector ownership have led to a shortage of private sector experience of investing in and managing infrastructure projects. A second issue is the sharing of the risks of the investment between the private sector and the government. Even after an appropriate ownership structure has been devised, private investors are unlikely to wish to carry all the risks. Thus governments find themselves reinvolved in the investments as risk partners or as the exclusive bearers of certain categories of risk. Appropriate risk sharing arrangements between the private and public sectors are essential but difficult to get right. Furthermore, as a result of this necessary continued government involvement, some of the originally perceived advantages to the government of turning over the investment to the private sector seem to disappear and this weakens the motivation of governments to look to the private sector. A third issue is that external financing techniques for addressing the specific risks encountered have been neglected during a period when most external finance took the form of sovereign risk borrowing. The private sector is not yet able to address all the financial risks involved in putting together the external financing package and official financing techniques require some adaptations in order to mesh effectively with what the private sector can and cannot do.

This report therefore covers the following aspects:

- the motivation of governments in privatising public sector investment programmes and the interest of the private sector in participating;
- the key issues in mobilising equity finance and addressing the problem of logical ownership;
- the main areas of risk in the financial structuring of such investments and the issues related to risk sharing between the host government and the private investors;
- the issues involved in putting in place the external financing package and in particular the role of private and official investment insurance.

The purpose of the study is first to make more widely known to governments interested in privatising public sector investment programmes the financial issues involved -- particularly those related to risk sharing between the government and private investors and arranging for appropriate ownership. Secondly, it aims to assess the scope for diversifying the pattern of external finance through such programmes including mobilising foreign equity finance and equity related flows. Thirdly it aims to identify ways in which the official and private sectors can work together in promoting such flows as an alternative to the much diminished prospects for commercial and export credit lending.

The recommendations of the paper focus on the three fundamental issues:

- the structuring of private sector ownership;
- risk sharing arrangements between the government and the private sector;
- the role of investment insurance arrangements in the external financial package.

Recommendations in respect of the first two issues are essentially addressed to the host governments. The recommendations on investment insurance concern the governments of the developed countries where markets or official insurance agencies provide the relevant coverage of investment risks for external financiers.

II THE FINANCIAL SETTING

1) The Government Motivation to Privatise Public Sector Investments

Governments in developing countries and in Eastern and Central Europe have a compelling financial motivation to look to the private sector to undertake at least part of the infrastructure investments that the state has carried out in the past. Capital constraints must be overcome and at the same time capital efficiency greatly improved. Over the past several years investment levels in many developing countries, particularly the indebted, have been curtailed so that there is an increasing backlog of investments that need to be carried out. (Table 1 in the Statistical Annex shows that investment in heavily indebted countries has been averaging about 19% of their GDP in recent years compared with about 29% for developing countries without debt difficulties.) At the same time there is recognition that many past investments yielded poor returns so that not only must investment levels be restored but also the productivity of new investments must be transformed. Many governments accept that their public sectors do not have the financial capacity or the record of productivity to achieve either objective. Public sector finances are under severe strain not only to finance social expenditures but also to service domestic and external debt and this situation will not change in the foreseeable future (Table 2 in the Statistical Annex shows efforts being made to cut public sector deficits in developing countries which now average about 2.3% of GDP). Thus they are increasingly looking to the private sector both for the restoration of investment levels and for a more productive use of capital. A recent report by the International Finance Corporation (IFC) noted a clear shift in the composition of investment in favour of private as opposed to public sector capital formation.

In addition to domestic financial considerations, the external financial picture is deteriorating for many developing countries. At the global level the German savings surplus is now needed to finance the restructuring of the former Eastern territory. The balance of payments surplus of Japan is also diminishing and its persistent savings surplus is expected to decline over time. Not only is this change in the pattern of global savings likely to be associated with higher real costs of borrowing for developing and other countries but in addition there are other factors reducing the availability of external finance. Foremost among these is the balance sheet weakness of commercial banks in the major financial centres. While initially associated directly with impaired loans to developing countries, the causes are now more varied and other

causes of weakness are dominant. The consequence is that even as some developing countries begin to emerge from over indebtedness, commercial banks still do not wish to add to their existing exposure but rather to attempt to continue to reduce it. (Table 3 in the Statistical Annex shows that commercial banks have not been adding to their net exposure for some years.)

A further important change in the external financial environment is the reduced availability of officially supported export credits. Repeated reschedulings and the more recent introduction of interest rate concessions in the context of debt relief agreements has brought home to governments a greater awareness of the true costs of official support. Moreover these costs will increase more as middle income indebted countries such as Egypt and Poland, as well as other indebted countries, receive further debt relief. At the same time as costs associated with the existing portfolio of the export credit agencies mount, there is also a heightened concern about the need to eliminate export subsidies as one way to reduce tensions in international trading arrangements. This concern is also likely to increase the cost as well as reduce the availability of officially supported credits. (Table 5 in the Statistical Annex shows that new commitments by export credit agencies have been virtually halved compared with the early 1980s and that growth in their outstanding exposure has moderated.)

Until now the Export Import Bank of Japan has stood out as the main exception to this picture, being virtually alone in its willingness to take on substantial new exposure in developing countries. This may be changing. Not only, as mentioned above, has Japan's overall financial situation changed, but the Exim is also negatively affected by debt relief operations in middle income countries and perhaps more important, financial deregulation in Japan has disadvantaged the Post Office savings system that provides the main source of funding for Exim. Moreover, Japanese banks are increasingly reluctant to take on new exposure under Exim guarantees.

In short, the possibilities for the indebted countries of Central and Eastern Europe and developing regions to attract new commercial bank loans or new officially supported export credits have diminished. The consequence is that governments must look to increased domestic savings to finance their development and to the possibilities of attracting external finance through new mechanisms.

As regards external finance, the privatisation of infrastructure investments is relevant in two ways. First such opportunities offer the possibility that foreign equity investment (and equity related flows) can be attracted alongside domestic equity. Secondly, the investments offer the opportunity for

governments and external financiers to turn away from sovereign risk financing (where loans are secured by an unconditional guarantee of the borrowing government) to a pattern of financing more reflective of the return on the project itself. (Where such financing can be secured or partially secured by the foreign exchange earnings of the project itself, it is normally referred to as "non-recourse" or "limited recourse" financing.) Given their adverse experience with sovereign risk lending, a shift in the way in which financing can be secured is potentially attractive to external sources of finance. In addition, if borrowing governments do not have to provide sovereign guarantees, they may be able to reduce their future debt servicing liabilities. Thus, in the light of past over-dependence on sovereign risk borrowing, such a development is in the interest of both financiers and borrowers. Hence, turning over infrastructure investments to the private sector can provide a way of meeting both a domestic public finance constraint and an external finance constraint.

There are also more detailed considerations from the government perspective that point in the same direction of encouraging private sector involvement in infrastructure investments. These include:

- the desire to shrink government involvement in investment decisions and reduce the intrusion of political factors into financial decisions;
- reservations about the quality of public sector management of major works, the cost effectiveness and productivity of public sector operations, and the need to depoliticise management;
- the sometimes poor record of the public sector in maintaining infrastructure investments and the possibility that private sector operators may achieve a better maintenance record;
- the concern that failure to undertake key infrastructure investments will have a broad negative impact on economic activity;
- the possibility that private undertakings could provide a benchmark for judging the efficiency of public sector operations;
- the prospect that infrastructure investments will provide the opportunity to build up domestic private contracting, utilities and service companies.

There is a distinction that can be made between a government's desire to associate the private sector with major new infrastructure investments (for example, a new road connection) and the privatisation of existing publicly owned infrastructure assets (for example, a power transmission network). In some cases, because of the desire to improve the efficiency and productivity of public sector operations, governments will look to the private sector simply to manage, operate and maintain investments rather than to associate the provision of private capital with major new investments. However, the distinction is not a rigid one. Existing public sector assets will often have an out of date capital stock and a backlog of maintenance and repairs which new owners will be expected to make good. (As mentioned later below, the distinction between existing and new or additional investments can be important in considering investment insurance arrangements.)

At the same time as recognising these potential attractions to governments, there are also certain cautionary considerations from the government's perspective. First, although for reasons discussed below, the private sector is likely to be interested in the investment opportunities, this interest is likely to be qualified by demands on the government to carry or share some key risks. Secondly, the nature of the investments will frequently require that a regulatory regime be put in place -- if one is not already existing. This means that a framework has to be established within which privatisation can proceed. Thirdly, there are cost considerations relating to the comparative advantages of public sector financing compared with private sector financing. Cost considerations include the likely higher borrowing costs for the private sector because the public sector may have a privileged position in the market; the possible high cost or indeed non availability of domestic long term loans making it difficult for the private sector to complete the funding; the costs of coverage for specific risks will also add to overall financial costs. While these factors may result in private financing appearing more costly than public financing, they need to be weighed against potential savings accruing from more efficient execution and management or the costs of not going ahead at all. Fourth, many such projects do not generate direct foreign exchange earnings sufficient to finance their foreign debt servicing and capital repatriation. Thus the speed and phasing of the programme, as well as the financial structuring of individual projects, will need to be considered in the context of the future foreign exchange resources of the country.

Annex 2 lists the developing countries and sectors where private infrastructure financing is under consideration or being sought. It includes the highly indebted countries of Latin America as well as countries in South East Asia that have avoided debt difficulties.

2) Perspective of Foreign and Domestic Private Sector

From the perspective of potential domestic and foreign private investors there are important preconditions to be met before private investment is likely to be contemplated. The host country concerned must have a generally favourable attitude to the private sector, both domestic and foreign. In addition, the quality of macroeconomic management will also be a factor. If these preconditions are satisfied, then there are certain strong attractions to the investment opportunities in infrastructure. These include:

- the appeal of major contracts and equipment orders;
- the prospect of profitable long term operating franchises after completion;
- for domestic companies, carrying out the investments may offer a demonstration of their international competitiveness and a domestic base load for their foreign operations;
- some projects may offer scope for foreign exchange earnings (for example the tolling of foreign vehicles, revenues from international communications, the licensing of landing slots, the levying of port dues etc.).

Despite the attractions of investment opportunities in infrastructure, the private sector too will have some important reasons for caution. First, private sector enterprises may feel that they will get some of the business anyway without having to take the same risk (particularly equity risk) if investments remain in the public sector. Secondly, as discussed later, there is a frequent lack of logical ownership for the investment. Thirdly, the financial risks are formidable. For the foreign equity investor these include maintaining and recapturing the foreign exchange value of the equity component. Finally, political risks will also remain. For example, in cases where there have been recent changes in regimes and attitudes towards the private sector, the system of commercial law may be incomplete and untested. Even if the general approach is favourable to the private sector, investors may question whether the decision makers have the ability and authority to see their decisions carried through in practice. The leading political risks include:

- the regulatory framework may be uncertain or unpredictable particularly in respect of tariff and competition policy;

- public sector customers may be important or dominant purchasers or users of output or suppliers of inputs;
- views about the role of the public sector may be subject to change;
- because of their size, significance and visibility, the investments and their manner of operation will be vulnerable to public criticism and to government intervention.

In summary, although there are good prima facie reasons for both the government and the private sector to explore the potential of private sector infrastructure projects and operating franchises, nevertheless both parties also have reason for caution. In particular, three inter-related issues have to be addressed. First, in order for such projects to proceed there needs to be a clear ownership structure identified. Secondly in the light of the risks for both parties, there has to be an agreed approach to risk sharing. Thirdly, agreement in both these areas must be compatible with financing possibilities, including external finance. The issues involved in each of these areas are considered below.

III ISSUES AND APPROACHES

1) The Structure of Ownership

A significant equity contribution is likely to be needed in turning public sector investments over to the private sector. Typically an equity contribution would be expected of at least 25%-30% of the total financing needed. The precise share of the equity component cannot be derived from any exact formula. Underlying considerations include the need for lenders to be cushioned against the ultimate risk of project failure. Cash flow considerations are also critical since financial viability requires some cushion against fluctuating interest rates on borrowed funds, foreign exchange risk on foreign currency borrowings, or against unexpected shortfalls in net revenues. A still higher equity component may be necessary when domestic and external loan financing availabilities are restricted or tied in to the amount of equity mobilised.

In some developed markets, bond financing has been traditionally important in financing certain types of infrastructure investment (for example, power utilities in the United States). However, most developing and capital importing countries are not yet able to offer long term inflation adjusted returns that make long term bond issues attractive to investors. Debt financing therefore will play a lesser role. At the same time, governments will need to search for domestic non-inflationary financing and be prepared (for example) to consider financing from the pension system or other social security systems. This is because an undue reliance on the flow of foreign financing could have an undesired upward impact on the exchange rate.

The quality of ownership is also critical. Lenders and particularly guarantors or insurers may not themselves be in a position to monitor closely the progress of the investment or to sort out problems before they become a major issue. Such regular monitoring is particularly important during the construction period. They therefore look to an appropriate structure of ownership and the quality of key backers. Governments have a similar interest before handing over key infrastructure investments to the private sector.

However, unlike in industry, agriculture or mining, or some service sectors such as telecommunications, where there is likely to exist an established domestic or foreign investor that has a natural interest in privatisation opportunities in similar areas of business as well as an established track record in management in that line of business, there is frequently an absence of such natural ownership for infrastructure investments. Although historically private capital

developed many infrastructure sectors, more recent historical experience has been of widespread public ownership and operation. Although there are some exceptions where private companies have continued to invest in and manage important infrastructure sectors (for example, water supply in France) there is generally a recent history of public ownership and operation in many countries, developed as well as developing. This break in experience and shortage of "natural" private owners makes structuring the equity component and the ownership arrangements considerably more complex.

Despite the recent lack of experience with such investments, infrastructure investments are likely to have an appeal to the investing public -- whether it be individual shareholders or institutional investors. They will be seen essentially as safe or "defensive" investments where the return will be relatively secure compared with changes in the competitive fortunes and market shares that effect the stock prices of industrial or commercial companies and also relatively immune to fluctuations stemming from foreign sources such as foreign exchange volatility or changes in demand for exports. Against these relatively safe features may be counted the political risk if privatisation policies are not regarded as settled and the investment possibly subject to future re-nationalisation or government interference. Another important risk factor is that most such investments have a long preparation and construction period before yielding a cash flow and the eventual return may therefore be frustrated by difficulties and risks encountered in the early life of the project. Operating franchises in respect of existing investments will not contain this latter source of risk and may thus be easier to privatise. On the other hand insofar as existing public sector assets may be rundown, their valuation may present difficulties.

Despite the potential for attracting the general investing public, in the case of many developing countries as well as in Central and Eastern Europe the possibilities of mobilising equity capital from the domestic investment community is hampered because stock market development has been neglected and in some cases markets are of recent origin. Infrastructure investments are large with a correspondingly big need for equity which the domestic stock market (even in a developed country) may not be able to supply. As mentioned above, long term bond markets have not yet been established to provide an alternative form of financing. Thus, in assessing the feasibility of raising equity for the privatisation of such investments, governments in developing countries have looked beyond the local investing public to alternative sources of equity.

Governments have also looked beyond the local investing public so as to avoid an over-fragmented structure of ownership for

the different qualitative reasons earlier indicated. While wide participation in ownership is welcome, on the other hand it is important for governments to be able to relate to the concession holding group and others with a major equity participation. This gives assurance that there are ownership interests with a strong motivation to see the investment through any difficulties in the construction and operating periods. Foreign financial sources will have similar reasons for wishing to see strongly defined ownership groups. Moreover, foreign investors will wish to see domestic equity partners that are strong enough and motivated enough to be effective interlocutors with the government in any of the areas from regulation to risk sharing where the relationship will be crucial to the success of the investment. The key criteria for the structuring of ownership therefore both for the government and for foreign sources of capital are as follows:

- an interest in being permanent shareholders;
- an ability to provide a strong long term management presence;
- the capacity to be an effective interlocutor with the government;
- the ability to deal with conflicts of interest among the various parties;
- credibility with the domestic and foreign financial communities.

In assessing the sources of equity other than the general public against these criteria, it is useful to distinguish between four parties potentially interested in ownership -- the promoters of the investment proposal; the contractors and suppliers of equipment for the investment; the concession holder who wishes to or has obtained the franchise and the operator of the investment who is interested in the management contract.

These four parties may not in practice be separate. For example the promoters may include contractors, and potential concession holders or those interested in the management contract in addition to independent promoters such as banks or consulting companies. Equally the concession holder may run operations as an alternative to seeking operators under contract. Nevertheless the interests are distinct and this has important implications when measured against the desired ownership structure .

Each of these parties needs to be considered in turn as potential sources of equity:

(i) Promoters:

There are certain categories of promoter that will not wish to take a significant equity stake. These include banks and independent financial advisers such as the accounting and consulting companies whose interest is in fees and client relationships. On the other hand in a number of over indebted countries, foreign banks may be a source of equity through the mechanism of debt equity swaps. It needs to be taken into account in this context that many banks will not wish to be long term equity partners since their eventual interest is in asset recovery. Thus, although they are a potentially important source of equity, they cannot completely substitute for "permanent" investors. Equally they are unlikely to be interested themselves in performing management functions outside the financial sector and thus any equity stake will have to be coupled with a different source of management.

(ii) Contractors and Suppliers:

A number of countries have looked to contractors and suppliers as the main source of equity for infrastructure investments. This is because of their clear self interest in the award of the contracts and the provision of equipment items. In the case of foreign contractors and suppliers it also reflects a way of securing foreign financing and in particular access to export credit facilities.

Despite these obvious attractions there are drawbacks which are perhaps not sufficiently recognised. Suppliers do not have a long term interest in the venture beyond the provision of the equipment and if forced to take an equity risk may well seek compensation in the price of equipment. Moreover while key shareholding arrangements need to be locked in at an early stage in the setting up of the financial arrangements, by contrast there may need to be flexibility in the source of supply of equipment until a late stage. Consequently a decision to alter the source of supply may unravel ownership arrangements. Finally, changing creditor government attitudes towards official support of exports means that supplier credits are no longer readily available.

As far as contractors are concerned there are also certain reservations about their suitability as equity holders. One reservation is that their interest may not extend beyond the construction period of the venture. A second is that their balance sheets are frequently arranged to cover large working capital needs but may not be so suitably structured for permanent equity participation. Thirdly there is the fundamental problem that if there are disputes between the concession holders and the contractors during the

construction period, or during maintenance, the resolution of any such difficulties may be immensely complicated if it involves a dispute between owners. Fourthly the management expertise of the contractors is mainly at the construction stage of the investment and not in the operating stages.

- (iii) **Operators under management contract:**
In cases where the concession holder is not the operator but is letting out the management contract, or substantial parts of it, for example to a specialised toll road operator, the enterprise seeking the contract or sub-contract may also be looked to as a potential equity partner. Again the main drawback is in the potential for conflicts of interest. If the contract is not being performed well it will be more difficult to make alternative arrangements if the existing operator is also a significant shareholder.
- (iv) **The Concession Holder:**
The various qualifications that have been indicated in respect of other sources of equity all point in the direction of the need for an independent concession holding group to provide a controlling equity stake. The participants in such a group might be the industrial or commercial users of the infrastructure investment in question or, in the case of operating franchises, it might be a specialised franchise operator in the relevant field (for example a port operating group). The other sources of equity mentioned above may all be useful minority equity partners in the concession holding group or independently but they are otherwise unlikely to meet the key criteria.

These various considerations on the structure of ownership therefore point to the key importance of the quality of the concession holder; to provide the assurance of a stable long term management presence; to deal with conflicts of interest among the other parties; to provide stability in the financial plan, and to deal effectively with the government. However, even with an appropriate ownership structure, private investors are unlikely to wish to carry all the risks of such investments. In order to explore private sector perceptions of the risks involved, it is necessary to examine the main categories of risk affecting such projects and the issues related to the division of the risks between the public and private sectors.

2) Risks

It is customary and useful to distinguish between two different types of risk:

- risks internal to the efficiency of project execution. These occur at different stages of the investment; notably those arising at the promotion and preparation stage; the construction stage; and those affecting its performance during the operating life;
- risks external to the project, some arising from commercial origins (for example lower than expected demand for electricity from a power generation investment) and those arising from political sources (for example a government refusal to allow a power tariff increase);

These distinctions are each relevant in considering the attitude of private investors and governments to private investment in infrastructure projects. In respect of the political risks external to the project, investors will have in mind partly the extreme forms of government interference -- the risk of confiscation, expropriation and (re)nationalisation of investment without adequate compensation. In some developing countries, the inability to operate an investment due to war or civil war may be a concern. However, there is also a gradation of political risk where less extreme forms of political interference can frustrate an investment. Moreover, particularly in respect of performance risk, it may not always be easy to distinguish clearly between risks arising from commercial as opposed to political reasons.

Against this background, the main categories of risk from the perspective of the private investor at the different stages in the life of the investment and in the different categories of commercial and political risk are as follows:

- the up-front costs of the promotion and preparation stages (including regulatory hurdles). These may be substantial; it may not be possible to spread them over a large number of other similar investment proposals (either within the country concerned or in the larger external market) and there may be no surety at the end of the day that the concession will be won or the investment proceed;
- the construction risks (for example that unexpected physical conditions lead to cost overruns or delays leading to additional financial costs) and completion risk (the dubious market value of an incomplete investment if the project halts for whatever reason in mid construction as well as the penalties and extra financial costs involved in completion delays);

- the risk factors effecting operating returns which include: technical risk (the facility does not perform at rated levels or has unexpectedly high maintenance costs); market risk (shortfalls in demand compared with market forecasts); other revenue risks due for example to public sensitivity to cost recovery (tolls and tariffs may be resisted); and including the risks of operating within a regulatory environment that may be untried and subject to government interference or alteration;
- the risks arising from any dependence on public sector purchasers of output or suppliers of inputs such as fuel for power generation;
- the prevalence of externalities likely to be relevant in any major infrastructure investment. These externalities may adversely affect costs (for example in order to offset an adverse environmental impact) or conversely they may have a potentially favourable impact on returns (for example higher land values along a new toll route corridor). However even where favourable they may be difficult to capture in the investors' benefit stream (as in the case of higher land values);
- risks arising from potentially competing investments. For example the government might licence an additional power generating plant that cuts into a market or might set user charges for railways at a level which discourages a road franchise use.

Finally, apart from the risks to all investors arising from the multiplicity of elements in the financing package there is, for foreign investors and lenders, the specific risk that foreign exchange may not be made available or that transfers may not be permitted or, where permitted, may be subject to an unfavourable and discriminatory exchange rate (perhaps an official rather than a market rate).

3) The Role of the Government

In order to make a success of turning over infrastructure investments to the private sector, host governments will have to address both the major issues identified. The government will need to concern itself with the structure of ownership so as to satisfy itself as to the quality of the concession holder. It will also have to give undertakings in respect of some of the risks. An approach to the structure of ownership has already been outlined above. The approach to risk sharing is discussed below.

Because of the multiplicity of the risks outlined above, the lengthy time horizon and the political nature of some of the risks, the government will inevitably face pressures to reinvolve itself in the investment in order to take back some of the risks from the private sector and to reduce the complexity of the financial structuring. These pressures can typically arise in the following areas:

- to reimburse costs of preparation and promotion;
- to provide standby financing to cover completion risk;
- to cover the additional investment and operating costs associated with meeting "social" objectives (e.g. environmental protection costs, serving social target groups etc.);
- to provide assurances on operating returns (for example by providing long term supply or purchase contracts, or by providing revenue support based on shadow tolls or tariffs, or by extending the scope of the franchise to offer operators the benefit of ancillary benefit streams such as land development rights);
- to provide foreign exchange transfer risk guarantees.

In some cases the lengthy enumeration of specific risks that governments are asked to carry has led external financiers back to request general purpose sovereign guarantees. These various pressures for government reinvolverment can reduce the attractiveness to the government of attempting to bring in the private sector into infrastructure investments and at the least requires a clear approach as to what risks, if any, the government should attempt to address.

A purist approach rejecting any government involvement in risk sharing is unlikely to be sustainable. Total absence of government involvement would require the following conditions:

- absence of foreign exchange risk or risk entirely offset by the foreign exchange earnings of the investment that can be insulated from the foreign exchange position of the country;
- a stable political commitment to the private sector;
- a known regulatory framework and "rules of the game";

- a sufficiently large volume of such investments in the global market that the risks of promoters, contractors and owners can be spread.

It is evident that virtually no developing countries (or countries in Central and Eastern Europe) will be able to meet all of these conditions. The issue therefore becomes one of specifying those risks where government participation is reasonable and in defining the form of government support.

In respect of the form of government support, it is crucially important that government undertakings are provided in contractual form. This is essential so that political risk insurance coverage can be obtained in the external financing package including insurance against government intervention.

In respect of those specific risks where government undertakings are justified, some questions relating to government involvement as a risk partner are relatively unproblematic. For example governments may well be prepared to provide for reimbursement of investors for preparation and promotion costs in circumstances where competitive tendering is sought and where the volume of similar investments does not allow the risks of the investors to be spread. Conversely in respect of construction and completion risk, governments should probably not have to offer guarantees or standby financing. The commercial insurance market will provide some cover against completion risk. For example, there is a small market offering insurance cover against the financial penalties likely to be incurred stemming from some of the risks of late completion including technical non performance and contractor or supplier lateness. However political and regulatory risks or loss due to the insolvency of any party are not covered. Performance bonding and professional indemnity insurance will provide further means of recourse in this area, although some risks will always remain to be covered by the investor and his financiers.

The most difficult area relates to performance risk. While the clearly commercial risks should be borne by the investors (for example, errors in market forecasts) the problematic area is where the risks stem from the dangers of government intervention (for example in the setting of road tolls or electricity tariffs). Government undertakings in respect of the supply of inputs or purchase of outputs by public sector bodies are also likely to be required as well as prior understandings in respect of rates of return allowable under regulatory regimes.

Other difficult areas which have a crucial impact on the anticipated rate of return to private investors relate to competition policy and to harnessing "externalities". In the case of some sectors of infrastructure investments the market may represent a natural

monopoly or oligopoly (for example a river crossing or a power grid). In such cases a clear regulatory structure is essential. In other cases it may be the government's intention to introduce competition or to permit and encourage new entrants. In this case the rules of the game on competition policy must be clear at the outset, including the period after which reviews might take place.

The issues associated with "externalities" are different. While there are economic benefits which accrue to the economy as a whole and which cannot be captured in the financial benefit stream to the project in many infrastructure projects, they may affect some subsectors or individual investments more than others. For example, mass transit systems typically operate at a financial loss. The issue is whether and to what extent the government should be prepared to compensate investors for the external benefits. This can be done by sharing in the investment costs or by providing partial operating subsidies for specific purposes.

The final area of government involvement relates to the foreign exchange transfer risk. Depending on the country concerned, government guarantees may not be required in respect of the equity component of the financial package or dividend remittances. Equity investors may be prepared to take their chances and assume that the real value of their equity stake will be maintained not only in domestic currency terms but also in foreign exchange terms and that any interruptions to dividend remittances will be temporary and can be averaged over time. However, except where there are foreign exchange earnings from the investment that can be set aside, a government foreign exchange transfer guarantee will almost certainly be required in respect of the loan element.

In all cases where the government takes on contractual obligations, the liabilities including contingent liabilities need to be transparent and recognised in the government's financial accounts.

IV THE EXTERNAL FINANCIAL PACKAGE

On the assumption that the host government has satisfied itself on the quality of the concession holder and that it is ready to give contractual and insurable undertakings in respect of some of the performance risks, the remaining issue is the putting in place of the external financing package. As discussed below, the possibilities of obtaining external loan finance are quite limited. It is therefore logical for the host governments to encourage concession holders to look to equity and equity related flows from abroad as a means to complete the financing package. Such flows are not likely to be forthcoming unless investment insurance arrangements can be put in place.

Non-recourse Lending

Commercial bank loans to developing countries are usually "secured" by the sovereign guarantee of the borrowing government ("sovereign risk" lending) or more rarely by the foreign exchange earnings of a project (referred to as "non-recourse" lending). The lack of appetite amongst commercial banks for new general purpose "sovereign risk" lending to developing countries and to the indebted countries of Eastern and Central Europe has already been emphasised. There may be a greater willingness to consider loans for specific projects -- particularly where there are major clients among the contractors or suppliers. However, even this interest is likely to be restricted to those cases where the loans can be secured by the foreign exchange earnings of the investment (pure non-recourse lending). A few infrastructure investments will offer this possibility but most will not -- at least not in sufficient volume.

Collateralised Lending

A variant of this approach (applicable when the investment concessionaire or the franchise operator has external accounts and assets) is to collateralise lending (through offshore escrow accounts and offset arrangements). Because multinational companies are likely to be involved in major infrastructure investments as contractors, suppliers or as concession or franchise partners, collateralised lending techniques are relevant to infrastructure financing and collateralised lending appears to have grown in the recent period. As discussed below, insurance cover is available. However, no figures are obtainable of this kind of collateralisation as distinct from the different kind of collateralisation involved in debt reduction packages. Although such techniques have therefore some potential (and have attraction to banks by being outside the base for any future country reschedulings) the traditional objections

need to be weighed. Collateralised accounts outside a country's general foreign exchange earnings may complicate foreign exchange management and may not result in net additional resources for the country. Because they limit flexibility in return for limited net gains, such arrangements may not be attractive either to the country or to the project entity. Thus, apart from the limited exceptions of non-recourse and collateralised lending, the possibilities of attracting commercial bank lending appear quite restricted.

Export Credit Financing

As also outlined earlier, the prospects of attracting official bilateral sources of loan finance (from the export credit agencies) also now appear quite limited in the light of their balance sheet condition as well as because of sensitivities over export subsidies. Moreover the export credit agencies have, like commercial banks, been accustomed to obtaining unconditional sovereign risk guarantees from borrowing governments. Because of their own adverse experience with sovereign guarantees, the agencies may welcome a shift away from sovereign risk borrowing. However, because they have relied so heavily in the past on obtaining such guarantees, they now face a need to adapt their lending techniques if sovereign guarantees are no longer available as a result of a borrower's privatisation efforts in infrastructure or any other sector. Escrow accounts would not normally escape Paris Club rescheduling arrangements.

Investment Insurance

Given the poor prospects for external loan finance, and the limited applicability of pure non-recourse lending techniques, as well as the key role of private equity in the financing structure of the investments, it thus makes sense for the promoters of infrastructure investments to look to investment insurance to provide the security to attract foreign equity inflows (both portfolio investment and direct investment). Investment insurance can be sought from two sources -- the private market and from official insurers.

1) Private Insurance

As far as the private insurance market is concerned, cover is obtainable against the risk that assets may be confiscated, expropriated, or nationalised. Dependent on the wording negotiated with underwriters in a particular case, such cover may include the risk of "creeping expropriation", i.e. discriminatory measures taken by a government that, although falling short of outright confiscation, in practice make it impossible to carry on a business as contemplated. Separate cover may be available against the inability to transfer dividends or profits. Cover against terrorism or sabotage, or acts of rioters and strikers or malicious damage is available. As mentioned earlier, cover is available in the private market against key risks arising in the construction period of an investment project. The private market can cover the normal physical damage and liability risks, and the credit insurance market can (subject to the satisfactory credit-worthiness of the debtors) protect the debtor item on the balance sheet by insuring against the insolvency of trade debtors. It will not of course cover commercial risk such as loss of market or an unproductive labour force.

Where lending is collateralised, cover is available against political risks that would frustrate the arrangements, e.g. prevent use of an offshore escrow account. Thus coverage in relation to collateral is normally against the confiscation, expropriation or nationalisation of the collateral, or the refusal of the host government to allow the collateralised lender to exercise his rights with respect to the collateral or against the inability of the lender to bring back the proceeds of selling the collateral.

There are two important limitations to the cover the private market will currently provide. First, a universal maximum risk arising of three years applies. Although it is in principle possible to roll cover forward (commonly by negotiating repeated twelve month extensions), this is dependent on the underwriters continuing judgement of the acceptability of the risk, and the insured has no advance guarantee that roll over will be agreed. Second, the normal private market exclusion of the physical risk of war damage on land applies.

Underwriters naturally pay regard to the total commitments they are carrying on a given market, but their view of what is acceptable will vary from market to market and from time to time. The broad range of cost of investment insurance is around 1% to 2% per annum of the sum insured. It is estimated roughly that the private market's investment insurance capacity is currently around \$200-300 million per country.

2) Official Insurance

In addition to coverage offered by the private market, over 20 OECD countries offer bilateral official investment insurance. These schemes offer long term cover (typically up to 15 years renewable for extension). They also provide cover against the three traditional classes of political risk (war, expropriation, and governmental restrictions on remittances). In addition to the length of coverage offered, the main difference between the private market and official sources of investment insurance lies in the cover against war, including both physical damage and inability to operate. Particularly important in context of this paper is that political risk coverage may be extended to cover other forms of political risk to which the investment is vulnerable, notably the risk of government intervention. It is also important that such cover is available for equity related loans for the investment, portfolio as well as direct investment and for debt/equity swaps. Furthermore the terms of loans covered under bilateral investment insurance arrangements are not subject to the OECD consensus arrangements that govern the terms of official export credits. Thus the repayment arrangements may be able to reflect more closely the project cash flow. In certain cases, the interest rate may be less costly (for example investment loans provided by Japan's Exim bank reflect its total cost of funds rather than the benchmark cost of market borrowings relevant in the context of the OECD consensus).

To date these official bilateral investment insurance facilities have been used only to a modest extent, in part because some are of recent origin. Thus while officially insured export credits outstanding to developing countries amount to around \$240 billion, by contrast the amount of officially insured investments is less than one tenth of that amount (under \$18 billion). The annual amount insured has been running in recent years at about \$2 billion per annum. The loss ratio has been considerably lower than the loss ratio on export credits, in part because Paris Club reschedulings almost invariably exclude the foreign currency transfers related to investment.

There are certain limitations to what is offered by official investment insurers:

- they do not cover existing investments (although the private market does);
- there may be ceilings imposed on coverage related to the size of the initial investment which diminish the value of the coverage over time;

- there may be annual limits on the amounts of cover offered against restrictions on remittances;
- there are gaps in geographical coverage for some agencies;
- with the exception of the three major investment insurers (for USA, Japan and Germany), small investment insurance portfolios elsewhere may serve to limit the cover available for individual large investment projects.

3) Measures to Expand Investment Insurance Availabilities

It can be seen from this brief description that in theory insurance cover provided by bilateral official insurance schemes (against long term risks and war coverage) supplements, as intended by the authorities, the coverage provided by the private market (against short term risks). There is however no neat dovetailing. Moreover there are highly important portfolio limitations applying to both the private and official insurers. A key question therefore is whether the amounts that can be provided by both sources taken together, will meet the needs of developing countries and the countries of Central and Eastern Europe if they are to rely on private domestic and foreign investment to provide the main investment impetus for their future development and given their very poor prospects for attracting fresh loan finance.

Observers of the investment insurance market have in the past tended to have regarded it as "demand constrained". In other words, the availabilities from official and private sources will rise spontaneously in response to any new increase in demand. The private market in particular is client oriented. In addition, the risk experience of the official sector has been good to date and therefore some of the constraints that apply to export credit cover do not apply. This view of the market is also supported by those who regard investment insurance as a factor which influences investment decisions only in marginal or "swing" cases -- far the most important factors being the political environment in the host country and the quality of macroeconomic management.

However, as outlined earlier, developing and other capital importing countries are likely to be turning increasingly to private domestic and foreign investors to make equity and equity related investments so that host countries will be more sensitive to the basic preconditions that must be met. At the same time, the external financing will not be available in traditional loan forms. Creditors also have good reason to wish to encourage capital flows in non debt creating forms. The governments of capital providing

countries recognise that it is in their interest to encourage the flow of private investment since otherwise the burden of financing would fall on official financing channels. They are already concerned that official flows are becoming too large a component of lending to developing and Eastern European countries. Official insurance arrangements, if meshed with private insurance arrangements, offer the potential of high leverage of limited government budgetary outlays. An issue therefore for creditor governments is whether there are new steps that can be taken by the capital providing countries to expand private and official investment insurance facilities so that private equity and equity related flows can play a larger role in the pattern of external finance. Improved products in the insurance market will themselves generate new demand.

There are two main obstacles to an expansion of investment insurance availabilities from both private and official sources. The first is their need to ensure a balanced spread of risk in their portfolios. As mentioned above, many official investment insurance schemes have relatively limited risk experience and the history of official cover for export credits is not encouraging. The ability of the private market to absorb large risks is also limited. The second obstacle is the question of capital adequacy needed to sustain an enlarged capacity of the combined official and private market.

The starting point for considering ways in which these two obstacles can be addressed and investment insurance can be expanded is to look for avenues that involve the private insurance and the official insurance market working more closely together. Such cooperation is attractive to the private market because it may generate more business. It is attractive to governments because a better meshing will also help assure governments that they are not financing what the private sector can be encouraged to do for itself.

There are essentially three routes to expand cooperation between official and private investment insurance facilities; through co-insurance arrangements; through re-insurance arrangements and through insurance or re-insurance pooling. They are not mutually exclusive avenues. They are particularly relevant to the issue of portfolio limitations.

Co-insurance between the private and official insurers would involve each party sharing some risks in common and taking on other risk elements separately but acting together so as to provide to the insured party a comprehensive coverage. The difficulties are in part technical (achieving integrated coverage when procedures and coverage possibilities differ). They are also in part a matter of differences in philosophy. For example, an official insurer may wish the insured party to approach an event giving rise to a claim, or may wish itself to approach a situation involving

recoveries against claims that have been paid out, in ways that are different from private insurers.

Re-insurance by the private market of officially insured claims has some potential in respect of risks falling due in the short term (up to 3 years).¹ Although long term insurance markets exist for certain types of risk, they do not cover the types of risk relevant in this context. Conversely, re-insurance by the official insurers of privately insured risk in respect of risks that would not normally be covered by the private market (such as longer term risk or certain types of performance risk) would also appear to have some potential. However, "takeout" arrangements for risks falling due in a future period are difficult to structure in an equitable way and re-insurance also raises the issue of "adverse selection" of risks chosen for re-insurance.

The limitations to re-insurance and co-insurance arrangements between the official and private insurers as a way to expand what both can offer do not mean that these avenues should not be exploited where possible. There is some experience being gained with both techniques, for example in the United States, France and the United Kingdom. However, insurance pooling arrangements may provide a more promising means of expanding investment insurance availabilities because they would directly address the issue of a balanced portfolio of risk. Under pooling arrangements, the participants in the pool give business to the pool and share in the risks of the pool according to a predetermined formula. The technique is a form of asset swapping, does not involve any additional capital and may not require a separate legal identity. (Annex 3 discusses the issues of pooling somewhat further.)

Co-insurance, re-insurance and insurance pooling all provide ways in which the official and private insurance market can adjust portfolio risk and thus enhance their capacity to take on new risk without necessarily involving additional capital. However, the second obstacle to the growth of the market identified above is the question of how to address capital constraints in the combined official and private insurance industry.

The closer working together of the private and official insurers may itself stimulate new capacity. At the same time, governments will not wish to set up a new agency or fund to provide additional backing for investment insurance. However, the regional development banks, particularly for Eastern Europe, Latin America and Africa might wish to set aside a part of their capital to

¹ Any policy may cover an investment made some years previously but not when a loss has possibly occurred already.

provide new capacity in the market probably through offering a supplementary insurance facility. The crucial requirement of such facilities is that they be "user friendly". This means that they should be automatically available on the joint request of the host government and the private and official insurers and not involve a second round of conditions. Private risk capital will already be at stake and so will the good faith and contingent liabilities of creditor and host governments. No further conditions would seem necessary. Some regional institutions may have statutory obstacles to moving in this direction. In such cases, they may be able to establish affiliates.

The precise capital requirement needed to back facilities providing an illustrative \$100 billion in total for the three regions is debatable. Official insurers tend to operate without a clear capital structure; the commercial market relates capital funds to premium income. However, under most assumptions about the capital needed, such facilities would provide the regional development banks with leverage on their capital base and a new way of relating to the private sector.

V SUMMARY AND CONCLUSIONS

The Issues

Because of the poor prospects for developing countries and the countries of Central and Eastern Europe to attract new loans from commercial banking and export credit sources, there is a strong case for them to look to foreign direct investment and investment related loans to play a much larger part in meeting their external financial needs. They need to attract such flows not only to the conventional industrial and commercial sectors of their economies but also into infrastructure investments and maintenance operations that have hitherto been carried out by the state.

In approaching the privatisation of infrastructure investments there are three issues that are crucial for domestic and foreign investors as well as for the sponsoring governments themselves. First, there is the issue of achieving an appropriate structure of private ownership; secondly there is the issue of arriving at equitable risk sharing arrangements between the private investors and the sponsor government and thirdly there are the issues associated with mobilising the external financing package. The recommendations of this paper concern the role of host governments and the external community in each of these areas.

Approaches

1) The Role of the Host Government

The host government must satisfy itself with respect to the quality of the concession holding group and provide contractual undertakings in insurable form in respect of certain of the risks. The concession holding group has to constitute a strong permanent presence in order to be an effective interlocutor with the government and to deal with the conflicts of interest between the different parties involved in carrying through the investment at the different stages in its life. It is important for the ownership structure that the government does not encourage an undue reliance on an equity stake from contractors and suppliers. It is also unrealistic of governments to expect the private sector to carry all the risks associated with such investments. Private investors will have to accept normal commercial risks and can arrange for insurance cover against some other risks including certain types arising in the construction and completion periods although some of these markets are small. However, there are areas of performance risk where the risks emanate from the government or from the public sector. In such cases it is reasonable for the government to give undertakings to the investors. By framing these undertakings in

contractual form, the government will enable investors to obtain insurance cover against the occurrence of clearly defined events. For foreign investors, insurance cover of this type can be obtained through the "non intervention" provisions of the political risk cover offered by bilateral official investment insurance agencies.

2) The External Community

Investment insurance arrangements are likely to play an increasingly key role in mobilising the external equity and equity related inflows. The authorities in creditor countries have an interest in encouraging an expansion of investment insurance facilities and can do so by promoting a closer association between their bilateral official programmes and the private market. In addition to building experience with co-insurance and re-insurance possibilities, the scope for insurance pooling arrangements should be explored. The capacity of the investment insurance industry would be further enhanced by the injection of capital by the regional development banks.

Attachments:

- Annex 1. Statistics.
- Annex 2. Private Infrastructure Investments under Consideration.
- Annex 3. Insurance Pooling.

ANNEX 1 - STATISTICS

- Table 1 - Gross Capital Formation, 1980-90
- Table 2 - Central Government Fiscal Balances, 1980-90
- Table 3 - Long Term Commercial Bank Lending, Net Flows
- Table 4 - Long-term Commercial Bank Lending, Net Transfers
- Table 5 - Changes in Officially Supported Export Credits, 1981-88

Table 1: Gross Capital Formation, 1980-90

(in per cent of GDP)

	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
All developing countries	26.5	23.0	23.6	23.6	24.1	24.1	23.6
Countries with recent debt servicing difficulties	25.6	18.6	19.3	20.0	20.2	19.1	18.6
Countries without debt servicing difficulties	28.1	29.4	29.1	28.8	29.2	29.5	28.7
Four newly industrialising Asian economies	--	26.4	25.4	27.0	28.3	29.5	30.5
Small low-income economies	17.3	16.5	16.2	16.7	17.0	17.2	17.7
Fifteen heavily indebted countries	24.6	16.9	17.7	19.0	19.3	18.5	18.1

Source: IMF, World Economic Outlook, May 1991

Table 2: Central Government Fiscal Balances, 1980-90

(in per cent of GDP)

	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
All developing countries	-1.5	-4.0	-5.3	-5.0	-4.4	-2.9	-2.3
Countries with recent debt servicing difficulties	-1.9	-3.6	-4.3	-4.6	-3.9	-2.5	-1.3
Countries without debt servicing difficulties	-4.0	-3.9	-4.5	-4.0	-4.0	-3.5	-3.2
Four newly industrialising Asian economies	--	0.8	0.4	0.5	1.8	1.4	0.1
Small low-income economies	-6.7	-7.4	-7.2	-6.8	-6.9	-7.3	-6.5
Fifteen heavily indebted countries	-6.7	-2.7	-3.3	-4.5	-3.7	-1.9	-0.8

Source: IMF, World Economic Outlook, May 1991

Table 3: Long-Term Commercial Bank Lending, Net Flows

(in billions of US dollars)

	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Severely indebted low-income countries	1.5	-1.2	-0.3	-0.1	-0.1	-0.1
Severely indebted middle-income countries	19.8	4.3	-0.2	2.7	-0.9	-0.7
Moderately indebted low-income countries	1.0	-0.3	0.7	0.4	-0.5	0.8
Moderately indebted middle-income countries	3.7	0.0	2.1	-0.1	1.4	0.0

Source: The World Bank, World Debt Tables, 1990-91

Table 4: Long-term Commercial Bank Lending, Net Transfers

(in billions of US dollars)

	<u>1980</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
Severely indebted low-income countries	0.7	-1.9	-0.7	-0.4	-0.7	-0.7
Severely indebted middle-income countries	4.7	-21.0	-21.2	-17.6	-24.3	-15.8
Moderately indebted low-income countries	0.4	-1.1	-0.2	-0.5	-1.6	-0.3
Moderately indebted middle-income countries	1.0	-2.9	-1.1	-3.0	-2.2	-3.4

Source: The World Bank, World Debt Tables, 1990-91

Table 5: Changes in Officially Supported Export Credits

1981-88

(in billions of US dollars)

	<u>1981-84</u>	<u>1985-86</u>	<u>1987-88</u>
New commitments (annual average)	67	43	35
Outstanding in developing countries (end of period)	147	186 (+39)	180 (-6)
Outstanding in countries with debt service difficulties	65	96 (+31)	96 (0)

Note:

Figures in parentheses show the net change. Preliminary figures for 1989-90, taken together, show a slight upturn in net outstandings.

Source: IMF

Annex 2:

PRIVATISATION OF INFRASTRUCTURE INVESTMENTS UNDER CONSIDERATION OR UNDERWAY

Argentina	Railways Road improvement and maintenance Sewage Telecommunications Water Electricity
Brazil	Power generation Water Railways Roads
Chile *	Railway freight transportation Ports management Toll roads
Hungary	Toll road
Indonesia	Telecommunications Power generation Toll roads
Ivory Coast	Electricity
Jamaica	Electricity
Malaysia	Airport management Telecommunications Railways Ports Electricity Toll roads Water
Mexico	Railways Transportation (toll roads and bridges) Telecommunications Power generation Ports Airport management

**PRIVATISATION OF INFRASTRUCTURE INVESTMENTS
UNDER CONSIDERATION OR UNDERWAY
(CONTINUED)**

Nigeria	Railways Power generation Telecommunications
Philippines	Electricity and power generation Port expansion Transportation (Manila light railway)
Singapore	Main transit railway Telecommunications Gas Electricity Water
South Korea	Electricity Telecommunications High speed railway
Thailand	Power generation Telephone Bangkok mass transit
Venezuela	Telecommunications Water supply Power distribution Ports

* Chile has already privatised tele-communications, telephones, electric power generation and distribution, urban transportation, airlines and water.

Source: *Privatisation International*

The purpose of an insurance or re-insurance pool would be to enable individual insurers, both official and private, by giving business to the pool and sharing in its risks, to be able to spread their portfolio risk over a wider range of countries and operations, thus improve the overall quality of their portfolio and hence enhance their capacity to take on additional risk.^{a)}

A first category of issue that would have to be resolved in any pool are the purely technical issues. Among the technical issues are the need for the primary insurers to exercise due diligence; and the need for the pool to be able to avoid the problem of adverse selection. The pool would also need fairly careful definition in order to accept the differing types of cover placed in the pool by different insurers.

Related to this first set of issues is the question of participation. It is possible that the three major bilateral investment insurers (Japan, Germany and USA) do not see the same need for pooling risk as the insurers that handle smaller and less diversified volumes of business. However, non participation by the majors would clearly weaken the appeal of any pool and in particular make it difficult to handle those exposures reflecting joint venture arrangements involving investors from the majors.

A second issue would be the need for appropriate administrative arrangements for the facility. A separate legal identity might not be needed (depending partly on the laws governing participants) but a monitoring and administrative arrangement would be. Creditor governments would probably not wish to set up a new organisation for the purpose. One potential existing umbrella would be MIGA.^{b)} It has the important advantage in the eyes of host countries as being seen as a "neutral" party in its approach to business; however MIGA is still in the early days of gaining market acceptance: depending on how its administrative role was defined, its inability to cover existing investments and differences in philosophy could be an impediment; its procedures in respect of claims may lack market appeal. While its procedures can be adapted to the specific purposes of administering a pooling

a) The Commission of the European Communities is exploring the creation of such a pool for export credits to the Eastern European countries. One difficulty is the limited spread of countries involved.

b) The Multilateral Investment Guarantee Agency.

arrangement, nevertheless insurers may prefer an umbrella organisation that represented "like-minded" interests rather than the constituencies represented in MIGA. Thus an existing creditor organisation such as the Berne Union might provide a more acceptable umbrella. However the Berne Union does not at present have the secretariat capacity to run a pooling arrangement and would need additional staff for the purpose. There may be other alternatives.

A third issue relates to the spread of risk. The purpose of a pool is to dilute undesirable concentrations of risk in the individual portfolios of participants. However, if the portfolio risk of all participants is concentrated in the same countries of say Latin America and Central Europe, assets placed in the pool would reflect the same concentration and the pool itself would be unbalanced. No advantage would arise unless the pool had independent capital backing.

Apart from the administration associated with any re-insurance pool, there is also probably a need for insurers, both private and public, to have a joint forum which allows for a greater exchange of information on investment insurance risk underwriting experience and in particular to explore re-insurance and co-insurance experience and potential. Again the Berne Union might provide a suitable forum.

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