



PPIAF: MECHANISMS TO MITIGATE REGULATORY RISK IN PRIVATE INFRASTRUCTURE INVESTMENT

December 2005

Final Report

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EXECUTIVE SUMMARY

This Final report has been prepared by Cambridge Economic Policy Associates (CEPA) following extensive desk research, a consultation exercise with infrastructure sector participants and a workshop on regulatory risk hosted by the World Bank, Public Private Infrastructure Advisory Facility (PPIAF), the UK Department for International Development (DFID) and other Private Infrastructure Development Group (PIDG) members. It builds on a working draft submitted prior to the workshop, incorporating some of the feedback from the workshop and interviews which were carried out subsequently.

Background

There has been a sharp contraction in private infrastructure investment in developing countries since the late 1990s. The World Bank's Private Participation in Infrastructure (PPI) database shows a collapse in investment from US\$114bn in 1997 to US\$64bn in 2004. This is particularly apparent in the water and sanitation supply and electricity industries (particularly distribution and sales), where issues have arisen regarding commercialisation and the acceptability of prices sufficient to support private investment.

A wide range of factors has reduced investor interest in infrastructure projects in developing countries. While in some cases this lack of interest is a function of weak fundamentals, in others it is due to market and government failures which raise the costs and risks of entry. One potential reason for this has been the perception that the regulatory and political risks are excessive from the perspective of investors as measured against the expected return on investment; and create unmitigatable risk of major losses and/or default from the perspective of lenders.

Two broad approaches have been suggested for addressing regulatory risk. The first of these is to limit or constrain the powers of third party regulators either by (i) statute or (ii) contract. The former of these would involve limiting the extent of the regulator's discretion, for instance, by entrenching in statute the methodology to be used to reset tariffs and subjecting determinations to binding arbitration. The latter involves greater promotion of 'regulation by contract' whereby the principles and process for contract review are clearly set out in underlying contract(s), which severely constrain regulatory discretion. These act so as to reduce the potential for regulatory risk to arise in the first place.

A second approach involves extending the use of risk mitigation products. This includes bringing regulatory risk into the scope of the protection offered by existing PRI products, to make them more effective in dealing with regulatory risks arising from the actions of independent regulators and/or governments. Partial Risk Guarantees (PRGs) offered by the World Bank are a form of extended PRI product.

Objectives and scope

The overall objective of the study has been to test the views or ‘hypothesis’ set out above, specifically so as:

- first, to understand the extent to which regulatory risk and the potential inability to mitigate it represent a serious impediment to investment flows to developing countries; and
- second, to ascertain what kind of approaches, mechanisms and products might help address regulatory risks and whether these, in themselves, would lead to a wider uptake of investment opportunities in developing countries.

Key concepts

An initial task was to introduce some of the key concepts underpinning the analysis, including project structuring and the different dimensions of independent regulation which have been seen as increasing regulatory risk. Project structuring involves the flexible use of different financial instruments and products provided by a range of different institutions. In the case of regulatory independence, it is important to differentiate between independence related to regulatory agency autonomy and that related to regulatory discretion.

Consultations

Some 21 institutions were interviewed as part of the consultation exercise. This produced some strong messages in terms of the steps required to reduce the scope for, and impact of, regulatory risk. These findings were supplemented by additional desk-based research into the ways in which some key specific risk mitigation products might be improved and adopted more.

Findings

Overall, the study has tended to support the hypothesis and emphasised the actions that will be needed to address regulatory risk in future, namely:

- Focusing on project fundamentals to improve the robustness of projects, so as to reduce the likelihood of unfavourable changes to tariffs – whether by regulatory contract or decision – having to be made.
- At least in the short run whilst regulatory capacity is being developed, reducing discretion through ‘regulation by contract’ approaches.
- Ensuring that investors and lenders are able to settle any arbitrations in neutral environments, free from political interference.
- Persuading governments to back-stop guarantees, such that PRI products and in particular, wide-ranging protections such as the PRG can be utilised more widely to address regulatory risk.

- As there is a relatively limited awareness of the potential to use PRGs in backstopping risk mitigation structures for both equity and debt, exploring means by which the use of the product(s) can be better mainstreamed within the World Bank (and potentially other development banks) and creating a greater awareness of its attributes within wider PRI markets.

It is, however, unclear as to whether the introduction of these measures, in themselves, will reignite international private sector enthusiasm in investing in developing countries, given generally unfavourable experiences to date. They should, however, be seen as being minimum conditions. Whilst there are some signs that international sponsors are once more beginning to consider developing country opportunities, it is not difficult to see that local regional investors may end up playing a much greater role and the financing structures that will increasingly be seen in future will differ from the project financing structures of the 1990s.

1. INTRODUCTION

This Final report has been prepared by Cambridge Economic Policy Associates (CEPA) following extensive desk research, a consultation exercise with infrastructure sector participants and a workshop on regulatory risk hosted by the World Bank, Public Private Infrastructure Advisory Facility (PPIAF), the UK Department for International Development (DFID) and other Private Infrastructure Development Group (PIDG) members. It builds on a working draft submitted prior to the workshop, incorporating some of the feedback from the workshop and interviews which were carried out subsequently.

In this introduction we set out the background issues to the study, which form an hypothesis to the interviews and research that form the rest of the study, before considering the study's objectives, scope of work and methodology.

1.1. Background

There has been a sharp contraction in private infrastructure investment in developing countries since the late 1990s. The World Bank's PPI database shows a collapse in investment from US\$114bn in 1997 to US\$64bn in 2004. This is particularly apparent in the water and sanitation supply and electricity industries (particularly distribution and sales), where issues have arisen regarding commercialisation and the acceptability of prices sufficient to support private investment.

A wide range of factors has reduced investor interest in infrastructure projects in developing countries. While in some cases this lack of interest is a function of weak fundamentals, in others it is due to market and government failures which raise the costs and risks of entry. One potential reason for this has been the perception that the regulatory and political risks are excessive from the perspective of investors as measured against the expected return on investment; and create unmitigateable risk of major losses and/or default from the perspective of lenders.

Experience in many developing countries has indicated that there are significant concerns over regulatory risk, particularly with new regulatory agencies in countries with little experience of such entities. In many developing countries, unlike the UK where independent regulation was introduced at the same time as wide-ranging sector restructuring and privatisation, regulatory powers have often only been introduced alongside partial sector reforms. Whilst the extent of privatisation has been greater in the countries of Latin America, many Asian countries have often just opened up bulk supply (that is, power generation and water supply) to private investors. The objectives of the state-owned entities have not necessarily been the same as those of fully commercially orientated entities, which has created additional risks.

Some people have argued that the creation of independent regulation or autonomous regulators gives more protection to investors because regulatory decisions should be

removed from direct political influences. Others have argued that the extent of *de jure* discretion available to independent regulators – and actual experience of the way they have used that discretion – has contributed to an increase in the risk adjusted cost of capital and to the contraction of investment flows to regulated industries in developing countries. In any event, perceived regulatory risk is just one factor among many that may influence investment / lending decisions and may not necessarily be the biting constraint to a renewed interest in developing country investments.

Western companies – investors and lenders – have typically looked to political risk insurance (PRI) to protect them against non-commercial risks in developing countries. Arguably, non-traditional investors have always sought other forms of risk mitigation, such as high level government agreements¹. However, at least for western investors and lenders, PRI or other forms of cross border investment insurance have represented the most direct means of mitigating non-commercial risks.

It has been stated that the inability to obtain appropriate insurance or guarantee instruments to cover risk of losses arising from unreasonable actions by independent regulators is a significant constraint on private investment in regulated industries. Specifically, political risk insurers have generally been unwilling to extend insurance beyond traditional expropriation cover and to stand behind host government performance risk (to the extent that they are even prepared to do this). PRI providers and others argue that when a host government is in dispute about the exercise of regulatory powers the actions are not necessarily political. Breach of contract insurance requires a dispute resolution process acceptable to the insurer as a condition for making a claim. Neither breach of contract nor expropriation cover is generally applicable in disputes officiated by an independent regulator. In particular, such provisions also fail to recognise the public and political nature of disputes involving pricing of what are perceived to be ‘essential’ public services.

Two broad approaches have been suggested for addressing regulatory risk. The first of these is to limit or constrain the powers of third party regulators either by (i) statute or (ii) contract. The former of these would involve limiting the extent of the regulator’s discretion, for instance, by entrenching in statute the methodology to be used to reset tariffs and subjecting determinations to binding arbitration. The latter involves greater promotion of ‘regulation by contract’ whereby the principles and process for contract review are clearly set

¹ For example, the Singaporean government made an agreement with the Chinese government to develop the Singapore-Suzhou Industrial Township in China during the 1990s. This involved significant investment by Singaporean companies to develop an industrial park, and bring both Singapore’s ‘hard’ as well as ‘soft’ (know-how etc) infrastructure to China. Despite the high level agreements, however, Singaporean investors were not ultimately protected and agreements were constantly renegotiated by the Chinese parties.

out in underlying contract(s)², which severely constrain regulatory discretion. These act so as to reduce the potential for regulatory risk to arise in the first place.

A second approach involves extending the use of risk mitigation products. This includes bringing regulatory risk into the scope of the protection offered by existing PRI products, to make them more effective in dealing with regulatory risks arising from the actions of independent regulators and/or governments. As will be discussed later, the World Bank's partial risk guarantee (PRG) has already been used successfully in Uganda and Romania to deal with the regulatory risk faced by newly privatised electricity distribution companies.

In the past availability of PRI was a strong requirement of private sector lenders to infrastructure investments in developing countries. Recent evidence suggests, however, that some of the major private sector lenders – in the light of recent experience in Asia and Latin America – now view traditional PRI as of less value than in the past. If this is generally the case, then enhancing availability and coverage of PRI products may not in itself result in the desired increase in financial flows to these countries. This study therefore looks beyond PRI mechanisms to explore other existing or potential mechanisms that may be used to mitigate the risks arising from independent regulation, that may help to attract investors back into developing country markets.

1.2. Study objectives and scope

The overall objective of the study has been to test the views or 'hypothesis' set out in the background, specifically so as:

- first, to understand the extent to which regulatory risk and the potential inability to mitigate it represent a serious impediment to investment flows to developing countries; and
- second, to ascertain what kind of approaches, mechanisms and products might help address regulatory risks and whether this, in itself, would lead to a wider uptake of investment opportunities in developing countries.

In terms of detail, our focus has been on the broad forms of protection that investors and lenders are looking to put in place to protect against the perceived problems that can arise in the underlying regulatory regime. Given the terms of reference, we have specifically

² This approach is set out more thoroughly in the World Bank discussion paper, "Regulation by Contract", by Bakovic, Tenenbaum and Woolf. This favours rules over discretion and argues that experience has shown that regulation by contract has generally worked in Latin America. They argue that independence is not enough and if it is present it needs to be coupled with a pre-specified, performance based contract with a multi-year tariff setting system and should include benchmarks or targets for pass through of controllable and non-controllable costs. In summary, Tenenbaum et al recommend that regulatory contracts must have: (i) clear tariff-setting principles; (ii) defined scope for pass through of input costs; (iii) process for managing forex risk; (iv) clearly defined and applicable legal framework; and (v) respect for the contracts.

highlighted the role of political risk insurance, but we have also considered a wide range of other investor and lender risk mitigating approaches.

1.3. Methodology

Much of the study has been based around a series of consultations with investors, lenders and regulatory experts, to understand from their perspectives, the mechanisms which might be employed to mitigate against the risks arising from the regulatory framework as it exists.

We have carried out 21 consultations to date with the parties listed in Appendix A. In addition, the issue of regulatory risk was also raised with a number of lenders and project sponsors in Asia during consultations for a PIDG initiative, the Asian Private Infrastructure Financing Facility (AsPIFF), which was being undertaken concurrently with this study. As there are clear limits to what might be achieved through such a relatively limited exercise, the findings from the consultations have been supplemented by extensive desk research and the experience of the authors³.

As detailed further in the Consultation Document set out in Appendix B, questions asked of respondents have been based around the following three areas:

- What do you understand to be regulatory risk? Why and in which ways does it arise?
- How serious an impediment to the flow of debt and equity capital to infrastructure industries in developing countries is regulatory risk and the inability to mitigate it through investment insurance?
- How can regulatory risk be best mitigated for infrastructure industries? Would the implementation of such approaches increase the flow of debt and equity to infrastructure projects?

The responses received are discussed in Section 3. Prior to this, in Section 2, we set out some of the key concepts which need to be understood to be able to interpret the findings. In Section 4, we focus on some the existing and potentially new products and approaches which might be employed to protect against regulatory risk. In section 5, we draw together our own observations and conclusions.

³ As far as possible, the interview responses and interpretation / views of the authors have been kept separate.

2. KEY CONCEPTS

There are a number of concepts that are highly pertinent to an understanding of the issues discussed in the remainder of the report. We begin by defining regulatory risk, before considering some of the financial instruments, products and structures commonly used to mitigate it, before examining the different aspects of independent regulation that give rise to such risk in the first place.

2.1. Regulatory risk

Professor Anton Eberhard described regulatory risk as being:

“the potential loss of regulated revenues resulting from arbitrary changes to an agreed or pre-specified legal framework⁴ governing the regulation of infrastructure investments”.

We would add that such risks are pertinent both to existing infrastructure investors as well as those who may be considering future investments and that investors and lenders are not necessarily just concerned about the risks created by the nature of the regulatory regime, but also:

- the (in)ability to mitigate such risks through appropriate investment insurance or project structures;
- uncertainty arising from the nature of any appeals/arbitration process even where appropriate investment insurance is available; and
- the likelihood of timely payment following a favourable arbitration outcome.

Any of the above, either individually or in combination, can undermine investor confidence in the sector and country, raising required rates of return, or in the extreme, preventing investment altogether.

2.2. Financial risk mitigation instruments, products and structures

In this sub-section we consider how different financial structures can protect against regulatory risk. We begin by considering some of the basic financial instruments that have many potential uses, but which are commonly utilised in the design of risk mitigation approaches, before moving on to look at specific risk mitigation products and then structures themselves; that is, combinations of instruments and products that have been put in place to mitigate regulatory risks in given situations.

⁴ Including primary and secondary laws, regulations, licenses and contracts.

2.2.1. Financial instruments

A number of financial instruments can be utilised within risk mitigation structures. They are often grouped into those which are '*funded*' and those which are '*unfunded*', the former being collateralised by cash and the latter being effectively a promise to pay in certain circumstances.

Typical funded instruments that might be used include bank accounts, escrow accounts and financial trusts, each of which provides a differing level of protection to the funds contained within them. The funds contained in each can be drawn on in specific situations. They are, for instance, common ways of holding subsidies prior to disbursement, ensuring that they are ring-fenced. Trusts are arrangements in which the parties cede full control to independent Trustees, whose actions are governed by a Trust Deed. Escrow accounts are also independently managed, with decisions being subject to the agreement of all parties.

The attractiveness of funded instruments – as opposed to the unfunded – is that it possible for the parties to observe the cash. Moreover, funds deposited in escrow and trust accounts – but not straightforward bank accounts – are protected against unrelated third party claims.⁵

Unfunded instruments are effectively promises to pay subject to certain conditions, which are not explicitly backed by identifiable funds. These include 'special commitments' (a promise from the World Bank to pay) and letters of credit (payments being made upon submission of invoices to a nominated bank). Instruments such as letters of credit can, in fact, be either funded or unfunded, depending upon the circumstances.

Unfunded instruments are more risky. The provision of unfunded instruments can only be undertaken by institutions with a certain credit rating, otherwise the inherent 'promise to pay' may not be seen as being reliable enough to be acceptable or else will attract a significant risk premium. The providers of unfunded instruments also need to gear their capital if they are to be commercially viable; that is pledge the same capital to a number of different exposures. In most financial regulatory regimes this requires that the entity offering the product be licensed.

2.2.2. Products

Financial risk mitigation products can be divided into those which are '*event specific*', that is they pay out only when a given event triggers a loss, such as PRI and PRGs, and more general *default guarantees*, such as partial credit guarantees. PRGs of the type offered by the World Bank (IBRD/IDA) can be seen as a form of enhanced PRI cover. Development Banks are able to provide this degree of cover because their exposure is normally counter-guaranteed by the host government of the country in which the investment takes place⁶.

⁵ For instance, a government creditor may seek to be reimbursed through ring-fenced subsidy funds for a totally unrelated claim.

⁶ The terms 'Insurance' and 'Guarantee' are often used interchangeably.

Political risk insurance

PRI is a policy which protects against explicit non-commercial risks which are outside of the control of the company purchasing the policy. The precise definition of these risks differs from policy to policy, but traditional PRI protection covers four broad types of risk. These are:

- **Currency Convertibility and Transferability.** Protects against losses arising from an investor's inability to convert local currency (capital, interest, principal, profits, royalties and other remittances) into foreign exchange for transfer outside the host country.
- **Expropriation.** Protects against loss of the insured investment as a result of acts by the host government that may reduce or eliminate ownership of, control over, or rights to the insured investment. In addition to outright nationalization and confiscation, 'creeping' expropriation, a series of acts that, over time, have an expropriatory effect, is also covered. This cover is sometimes referred to more widely as 'Confiscation, Expropriation and Nationalisation' (CEN).
- **War and Civil Disturbance.** Protects against loss from damage to, or the destruction or disappearance of, tangible assets caused by politically-motivated acts of war or civil disturbance in the host country, but rarely includes revolution, insurrection, rebellion and terrorism.
- **Breach of Contract.** Protects against losses arising from the host government's breach or repudiation of a contract with the investor. In the event of an alleged breach or repudiation, the investor must be able to invoke a dispute resolution mechanism (e.g. through an arbitration) in the underlying contract and obtain an award for damages.

These are all 'event specific' country/political insurances that are provided by a range of public and private sector institutions, as opposed to general credit guarantees and insurances, which are much more comprehensive covers. 'Event specificity' means that it can only be paid out in the case of defined events – as opposed to credit products which are general borrower/ buyer defaults. Moreover, PRI policies provide cover for *specified* political events, not *any* political event.

To varying degrees, both investors and lenders have traditionally sought some form of PRI cover when investing in new markets. For lenders, adequate PRI cover has often been a strict requirement for any loan, although equity investors have been more selective when they have sought cover.

In theory, PRI can provide protection against adverse regulatory actions, although as can be seen, regulatory risk is not specified as a separate political risk category. 'Expropriation' and 'Breach of Contract' have been the two gateways through which investors and lenders have sought to protect themselves against 'regulatory events'. Thus, a repudiation of an agreed

contract could lead to a claim under the latter, whereas the setting of tariffs, review after review, by an independent regulator at levels which are less than required to generate a suitably risk adjusted return, could be seen as creeping expropriation. The difficulty lies in proving these events.

Not all private – or even public – providers offer full breach of contract cover and where they do, they do so on a case-by-case basis. Often insurers are covering the risk of non-payment of an arbitral award arising from a breach of contract; for instance, MIGA’s standard cover, as insurers do not want to be in a position where they themselves are having to determine whether or not there has been a breach of contract. Both equity and debt providers especially, are understandably concerned over the time required for arbitration to take place. ‘Denial of justice’ clauses are a means by which companies can claim against policies where they have been denied a right to have their breach of contract claim heard.

Partial Risk Guarantees (PRGs)

World Bank (IBRD and IDA) PRGs are not new products. They have traditionally been used to protect lenders against political risks – such as breach of contract – in environments where they have been unable to procure other either private or public sector support. Bilateral investment insurers, for instance, might not be either able or willing to cover certain host government performance risks.

PRGs are offered by many development banks, including the Asian Development Bank (AsDB) and Inter-American Development Bank (IADB)⁷. They are termed partial because they can be called only in the event of losses arising from certain occurrences. As with PRI, they are therefore event specific products and typically differ from public providers of PRI (such as MIGA) because of the broader range of risks that they can cover, particularly enhanced breach of contract cover and the extent to which they can be used to cover host country – including sub-sovereign - obligations.

In return, institutions such as the World Bank, require that the host government provides it with a counter-guarantee, such that the risk really lies with the government. The pricing is lower to reflect this fact. IADB and AsDB can offer PRGs without a counter-guarantee, albeit at more market pricing. As long as the host government is prepared to indemnify the World Bank, PRGs can be tailored to provide a very broad range of protections including, as will be discussed later, regulatory risks.

Whilst the World Bank still requires indemnification from the recipient country (that is, a counter guarantee), there have been several recent reforms of the PRG instrument, aimed at creating a greater uptake in its use. First, in the past year or so, in the case of IDA countries, the PRG now only scores 25% of the amount guaranteed in terms of the IDA ‘headroom’ consumed, thus arguably creating a further 75% of additionality over a straight loan (IDA credit). At one time, a PRG scored as much against IDA ‘headroom’ – that is, the total IDA

⁷ The Asian Development Bank recently renamed its product a ‘political risk guarantee’ in order to differentiate it from its partial credit guarantee product.

funds available to a given country at any one time - as a full IDA credit, which incentivised countries to borrow funds (that is publicly finance) rather than guarantee private financing .

Second, it has always been a requirement of the World Bank (and AsDB) PRG that debt is the beneficiary of the PRG and that the projects were green-field. The other recent development in the use of PRGs is that they can now be used to support equity. The IDA PRG is then used to guarantee a local bank, which in turn provides a stand-by Letter of Credit (L/C) facility to the equity participant(s) in a deal, which can then be drawn upon if it is determined that a stipulated political event has occurred.

Third, most recently, the final requirement set out in the paragraph above has been relaxed, such that it is possible for the equity to draw on the L/C and the Commercial bank provider to draw on the PRG before there has been such a determination, reducing the liquidity risks faced by companies involved in such disputes.

Partial credit guarantees

Partial credit guarantees (PCGs) differ from PRGs in that they pay out following an interest payment default; that is, they are not linked to specific events (although defaults arising from certain issues may be ‘carved out’ from the cover). Normally they will only cover the back end years of any loan, their aim being to increase the tenor of loans, although they can be issued for the full length of the loan. Because they are general default guarantees, they are not subject to an arbitration process to determine any causation – as such they are ‘on-demand’ guarantees. Given the challenge of precisely stipulating risks, such straightforward all risk cover and ‘on-demand’ features can make them of interest to banks, especially in more uncertain markets. As set out in Table 2.1, there are a number of development institutions that provide PCGs.

Table 2.1: Main providers of PCGs

Provider	Counter guarantee required (yes / no)	Available to private and public sector led projects?	Available for local currency? (yes / no)
<i>Bi-lateral development agencies</i>			
Swedish International Development Agency (Sida)	no	Private	yes
USAID	no		yes
<i>Development finance institutions</i>			
International Finance Corporation (IFC)	no	Private*	yes (but limited)
FMO	no	Private	yes (but limited)
Proparco	no	Private	yes (but limited)

Provider	Counter guarantee required (yes / no)	Available to private and public sector led projects?	Available for local currency? (yes / no)
<i>Development Banks</i>			
IBRD	yes	Public	yes
AsDB	no**	Public /private	yes
IADB	no	Public /private	yes
<i>Other</i>			
GuarantCo	no	Public /private	yes (limited to local currency)

* IFC does have a separate municipal fund; ** option of both

The main ways in which the products differ is whether or not a counter guarantee is required from the host government and the focus on private or public sector led projects. Most are technically available to support local currency debt finance, although in reality this will depend upon the creditworthiness of the local institutions involved. PCGs can be instrumental in raising local debt capital which is preferable to forex where project revenues are received in local currency.

2.2.3. Structures

Typically, structures comprise a combination of products and usually additional instruments. In the case of the World Bank's provision of PRGs to lower regulatory risk, there are now two structures employed: (i) a limited recourse structure which protects debt and / or shareholder loans; and (ii) a letter of credit (L/C) structure, which can be used to protect equity.⁸

Limited recourse structure

This guarantees lenders or bond holders who are providing debt to a project within a limited recourse structure. The fact that a project is limited recourse means that lenders are largely dependent upon the project's cash flows to repay their loans; the investors' exposure is largely limited to the equity that they have in the project. This is a typical form of project financing.

In this approach, the PRG can be drawn if a regulator breaches any agreement which gives rise to a non-payment of debt service. As initially conceived, it was a requirement that the reason for the default was not disputed by government.

⁸ This terminology is taken from 'Mitigating Regulatory Risk for Distribution Privatization – The World Bank Partial Risk Guarantee', Gupta et al. 2002.

Letter of Credit (L/C) structure

The L/C structure is a much more recent development that to date has only been used in the case of two privatisation transactions in Uganda and Romania, which closed in 2005. In the case of regulatory risk it acts as a form of enhanced breach of contract cover. A direct contractual agreement is entered between the investor and the government. The agreement confirms the obligations of the government with respect to the agreed-upon regulatory framework and the mechanism to resolve disputes and commits the government to the regulatory framework and therefore to the ‘regulatory contract/licensing agreement’ (which may also include provisions concerning frustration of dispute resolution process, competition policy, right to enforce collection etc). In the case of Uganda, the specific regulatory terms were already part of the contract documents. In the case of Romania, where regulation has been by decree, a separate agreement needed to be created – a government support agreement (GSA).

In the event that there is a perceived breach of the agreement, the investor is able to draw on the L/C provided by a local commercial bank. The commercial bank is happy to provide the L/C because if government fails to reimburse it, the PRG can be drawn on. A very important recent innovation in the use of the PRG is that the L/C can be drawn on prior to an arbitral award being made, which is essential in terms of maintaining the investor’s liquidity. Previously, the L/C could be drawn on if government – the counter party to the GSA – did not dispute the reasons for doing so. In the case of Uganda, however, the ability to draw on the L/C even if there were to be a dispute, was written into the project documents with the agreement of government. In the case of Romania, to do this, the investor has to post a bond which can be drawn on in the event of an arbitral award going against the investor. Fuller discussions of both of these arrangements are discussed in Boxes 2.1 and 2.2.

Box 2.1: Uganda L/C PRG structure

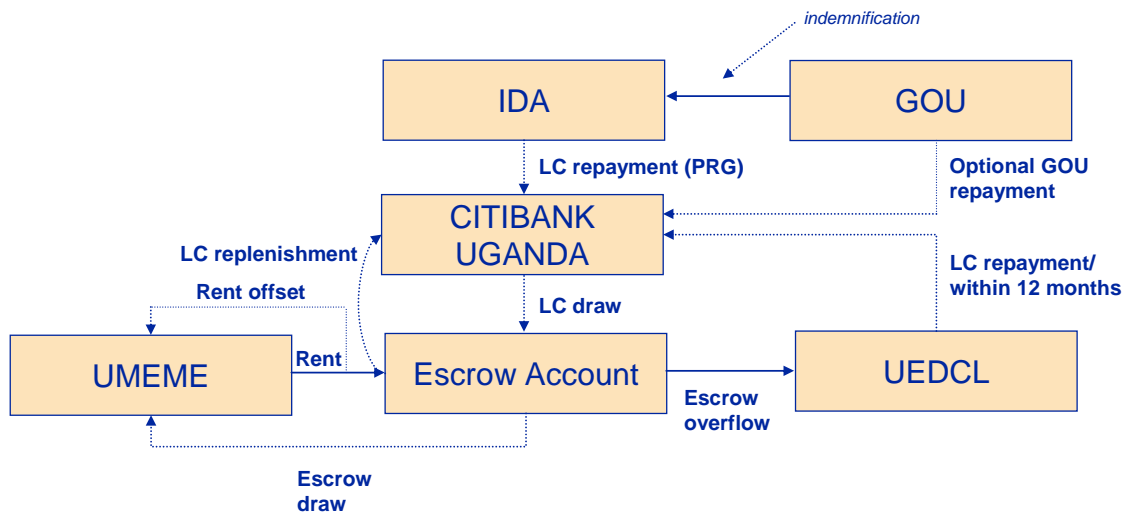
A PRG of US\$5.5 million was issued in support to the concessioning of the Uganda Electricity Distribution Company's (UEDCL) assets to Umeme Limited, a private consortium involving Globeleq Ltd and Eskom Enterprises, which is mandated to manage UEDCL's business for a period of 20 years. The PRG was issued for the benefit of Umeme Ltd to mitigate certain perceived regulatory and government agencies electricity payment risks.

Under the PRG structure, Umeme will have recourse to a Liquidity Facility in the form of a Standby Letter of Credit issued by Citibank Uganda Limited and backed by the World Bank PRG. The PRG specifically provides protection in relation to the following issues.

- Regulatory Framework events, including: Non compliance by the Regulator of the pre-agreed tariff framework relating to the distribution tariff; full pass through of the bulk electricity supply from UETCL ; timely adjustments of tariffs (45 days after tariff submission)
- Government Payment Arrears – non-payment of GOU Agencies, Electricity Bills (60 days)
- Termination Payments – Buy out amount for un-depreciated investments resulting from Early Termination of the Concession due to Breach of Concession Agreements by GOU and its entities.

Under the contract, Umeme enjoys the benefit of an 18 month 'trial period' for the 20 year concession. Umeme are allowed to recoup half of their initial investment obligation of \$5m, if they decide to exit after the trial period.

Despite this let-out clause, Umeme are working to cooperate with Government and the regulator to make the concession successful. Umeme has reputedly sought to reach agreement on tariff increases even where the Government and the regulator are at odds with each other. Likewise the regulator appreciates that the information Umeme were given at the time of bidding is limited and the need can arise to re-evaluate project parameters contained within the seven year contract with the regulator. Constant dialogue is maintained between the regulator and the operator which reduces the risk of the problems arising. The fact that these parameters are fixed for seven years does constrain regulatory discretion, but from Umeme's point of view the most important factor is that tariff formulae are honoured however they are implemented in practice. It is the fact that tariff increases are ultimately protected by the PRG that sustains the investment.



UEDCL – Uganda Electricity Distribution Company Limited
Umeme – Distribution Concessionaire

The Romanian privatisation example is provided in Box 2.2.

Box 2.2: Romanian electricity distribution privatisation

A Partial Risk Guarantee was utilized to support the privatization (through a majority asset sale) of the Banat and Dobrogea Electricity Distributions Companies in the amount of EURO 60 Million (approved in December 21 2004, transaction closed on April 15, 2005). The investor was Enel SpA, who acquired a 51% shareholding through an equity injection. Eletrica (the state-owned enterprise) retained 49% shareholding. The licensing framework consisted of a distribution license for 25 years and a supply license for 8 years (renewable) for captive consumers (subject to EU policy). Revenues are regulated by the National Energy Regulatory Authority (ANRE), on the basis of a price cap/price basket methodology introduced in January 2005, prior to privatization. More specifically, the framework provides for a tariff mechanism based on recognized costs by justified and guaranteed return (weight adjusted costs of capital - WACC), incentives for performances (price cap) and full pass through for supply of electricity.

A Government Support Agreement was entered between the Government of Romania (GoR) and the Discoms defining the risks to be guaranteed and the claims mechanisms (see below). A Letter of Guarantee was issued by an L/G bank undertaking to pay the Discoms in the event of a claim under the GSA - for loss in revenues resulting from a change or repeal by the Government or ANRE or non-compliance by the ANRE with the provisions of the agreed regulatory framework. The Government, through the Ministry of Public Finance, has the primary obligation to reimburse the L/G Bank, while the WB undertakes to do so in the event the GoR fails to meet this obligation.

Specifically, the PRG provides a guarantee for loss of 'regulated revenues' resulting from a 'Guaranteed Event'. 'Guaranteed Events' are non compliance by the Regulator and change or repeal by the GoR of the pre-agreed framework relating to:

- *distribution tariff formula;*
- *the full pass through of the electricity costs; and*
- *pass through of PRG-related costs.*

The PRG covers a term of 5 years (three years of the first regulatory period and the first two years of the second regulatory period). It was priced at 1% per annum on the guaranteed amount payable six months in advance. In addition, there is a Front-end Fee of 0.5%, an initiation fee of 0.15% and a Processing Fee or up to 0.50%. Of the 1% Guarantee Fee, the Bank would refund to the Government that portion of the fee that corresponds to any waiver to Romania of the Bank's lending spread, subject to the being no breach of the Bank related Agreements.

As a result of the PRG, the WACC was reputedly reduced from 14% to 12% for the first regulatory period and from 12% to 10% over the second regulatory period.

2.3. Concessions versus licenses

A concession is typically a fixed, or indefinite, long term contract, which like other forms of contract, places obligations on the parties to it. In its strictest sense a license is a permission to do something. However, within many forms of infrastructure, contracts and licenses can be very similar and might be best thought of as 'regulatory contracts'. Regulatory contracts can comprise one or both.

Where such regulatory contracts differ, is the extent to which their terms are subject to third party regulatory scrutiny. Private sector infrastructure investment can range from simple time-limited, highly-specified concession contracts with government purchasers; to contractual arrangements which are subject to varying degrees of third party 'regulatory' or other scrutiny; through to regimes in which utilities operate under licenses, which are

awarded and subject to typically a five year review by third party ‘independent’ regulators with considerable discretionary powers (particularly as regards tariff setting).

Whereas initial private sector investment in the infrastructure sectors often involved pure concession contract approaches, in which concession contracts are ‘set in stone’, except for formulaic pass through of certain costs, some developing countries have established more complex regulatory frameworks and agencies to oversee ‘natural monopoly’ industries (particularly in electricity and water). These regulators often have the power to review and intervene in the commercial relationships of operators and customers.

2.4. ‘Independent’ regulation

The regulatory ‘independence’ referred to in the terms of reference has two key aspects:

- the **degree of autonomy**: that is, the extent to which the regulatory agency is able to act independent of government; and
- the extent of **discretionary power**: that is, the legal powers both in statute and in contract which allow the agency to alter the commercial aspects of contracts and licenses.

2.4.1. Autonomy

An autonomous regulatory agency is one which is at complete arm’s length from government and might be typified by a lack of reliance for funding from government, although other factors will also contribute to its autonomy. This should lead to an ability to make decisions free from the influence of government. In reality, however, whilst some agencies may appear to be nominally independent in terms of their structure, they are actually under the influence of either government or consumers. Their ability to implement their mandate appropriately may be further impeded by a lack of institutional capacity. Moreover, a high degree of autonomy may be problematic if a regulator chooses to operate with little consideration for the objectives for which he was appointed.

2.4.2. Discretion

The powers by a third party to intervene can vary considerably. The regulatory agency may operate entirely independently of any bilateral contracts, or it may operate to monitor and enforce a concession contract or something in between. For instance, as discussed in Box 2.3, in Pakistan, whilst the regulator has wide ranging powers as regards transmission and distribution (which are currently state owned), his power is limited to agreeing power purchase agreements (PPAs) with private sector independent power plants, before they are implemented. Once agreed, he has no further powers to intervene.

Box 2.3: Regulatory risk in the electricity sector in Pakistan

Whilst privatisation reforms are proposed in electricity distribution and transmission, with commercialisation already having taken place to some extent, it is only generation that is currently open to large scale private sector investment. There was a wave of investment in IPPs in the mid 1990s (including HUB), another is required to keep pace with 1-2GW annual increases in electricity demand.

The whole sector is regulated by NEPRA, a relatively powerful independent regulator, with powers for periodic review of investments and tariffs. NEPRA has, however, relatively limited powers as regards the IPPs. Whilst the regulator has to approve tariffs within the negotiated power purchase agreements (PPA), once these have been set he has no powers to change them. The power projects themselves can be either unsolicited or competitively solicited. Where sponsors and lenders have thought that the rate of return sought by the regulator (at 15%) was too low compared to their requirement for an 18-19% return, they have reportedly threatened to walk away from projects. Whilst this has caused concerns, the fact that following an agreement (the regulator has typically relented), the fact that NEPRA has no powers of period review, significantly reduces any regulatory risk, in the absence of a change in legislation.

Since the mid-1990s, the Private Power and Infrastructure Board (PPIB), which is the entity responsible for promoting and facilitating power sector investment has sought to developed a 'bankable' security package, in which the government of Pakistan (GoP) stands behind the obligations of the state-owned utilities purchasing the electricity (and their potential privatised successors). There are pass through arrangements on all uncontrollable costs such as fuel and unfavourable exchange rate movements. This is seen as being necessary to attract private sector investment.

There is no doubt that this leaves the currently state-owned transmission and distribution entities with significant market risk. The sector's problems are compounded, however, by the fact that cost increases are not passed through to customers. Part of this is a political issue, in that government is prepared to subsidise energy costs. However, some commentators also believe that NEPRA places the connection of the new customers and affordable power above the requirement to make the system commercially sustainable. In the short term this prevents both privatisation and makes commercial lending to the regulated entities difficult without government guarantees and sooner, or later, could result in 'another California'.

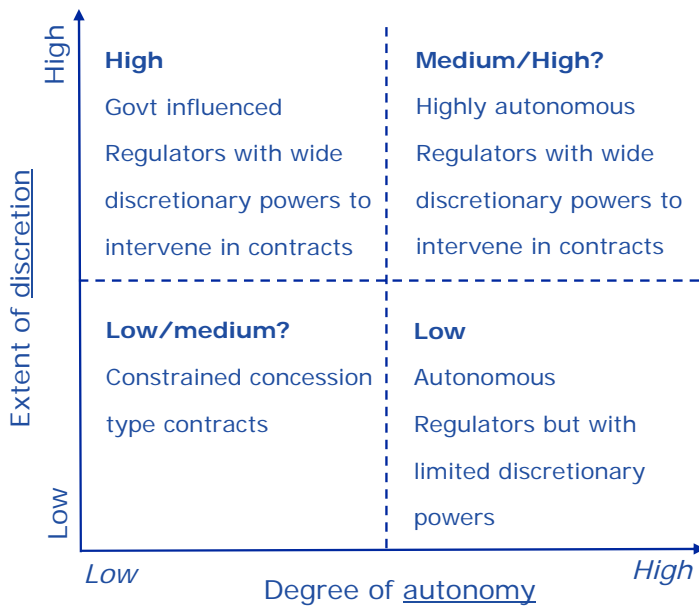
Source: CEPA research and interviews

This contrasts with, for instance, the Manila and Buenos Aires water concessions, where the concession contracts provide for periodic regulatory review, much as in the same way as the UK water licenses.

In many developing countries, however, the statutory powers of the regulators are often poorly defined, which means that, at least *de jure*, they may be relatively unconstrained. As such regulatory power, whether it be exercised with or without government influence, is not necessarily related to the formal, legal powers or statutorily defined discretion.

As set out in Figure 2.1, differing degrees of autonomy and discretion give rise to a number of different outcomes, with arguably different anticipated risk profiles.

Figure 2.1: Risk associated with differing combinations of discretion and autonomy



The analysis that follows covers all of these paradigms. However, as might be expected, we have focused on those areas where, in particular, regulatory discretion has created most problems. In a relative sense, the Pakistan example aside, we have not focused as much on situations in which regulators have only limited discretionary powers, other than to demonstrate any key differences with the other two situations set out above.

3. ESTABLISHING THE IMPACT OF REGULATORY RISK ON FINANCING FLOWS AND IMPLICATIONS FOR REMEDIAL INTERVENTIONS

3.1. Introduction

In this section we consider the responses of the interview participants to the questions posed in the consultation document. We discuss the views of respondents around the following high level themes:

- the sources, causes and incidence of regulatory risk;
- the availability of PRI / insurance and its consequences; and
- the best ways of mitigating regulatory risk and potential for increasing financial flows.

3.2. Sources, causes and incidence of regulatory risk

We focused our discussions on a number of specific issues:

- what is understood by regulatory risk;
- how regulatory risks might be differentiated from political risks;
- how regulatory risk arises;
- which regulated components are most sensitive to regulatory scrutiny; and
- the incidence of regulatory risk, in terms of those sectors and countries where it is most prevalent; and the participants to a transaction who feel it most acutely.

3.2.1. Understanding regulatory risk

Taken together, the respondents tended to see three sources of regulatory risk, which could potentially lead to the loss of regulatory revenues. These are:

- the absence or incompleteness of ‘rules’ necessary to provide the required level of comfort for investors and lenders;
- a lack of predictability in the application of agreed *rules* and *processes*; and
- uncertainty regarding the ability to enforce rules.

Absence of rules

This is becoming less of a problem in that most countries do have some form of legal framework governing private sector investment. Where this does not exist it is increasingly unlikely that investment will take place. However, interpreted more broadly, incompleteness of rules or gaps in the legal and regulatory framework (including contracts) gives rise to risk and uncertainty. Specific manifestations of this mentioned by the respondents included:

- the absence of stipulated mechanisms or even general principles that are to be applied in determining tariffs and investment levels; and
- unclear provisions as regards arbitration and appeals procedures, not least an inability to establish international, independent arbitration procedures.

As will be discussed, such issues are increasingly likely to represent ‘show-stoppers’ to investment. In addition, is the ever present threat of the introduction of new, unanticipated rules.

Predictability

Limited predictability of application of the regulatory framework and specifically, an arbitrary interpretation of it, was the most commonly recognised aspect of regulatory risk.

Commonly quoted examples of a lack of predictability, included:

- belated implementation of agreed contractual mechanisms; such as pass through of formulaic tariff increases or delaying the such increases for electoral or other purposes;
- non-sensible and / or unreasonable interpretation of contractual documentation by regulators; and
- political interference in regulatory processes and in particular the over-riding of regulatory decisions favouring the operator which, in the extreme (such as in Peru) has led to governments sacking regulators.

Enforcement of laws

Investors and lenders also need to be confident that they can enforce contracts (and awards), particularly when regulators or contractual counterparties have interpreted them wrongly. The quality of the legal system is paramount in this respect. The common problems noted in this respect were:

- the potential for contract frustration; that is, an absence of timely justice, or in the extreme, denial of justice;
- an inability to have disputes reviewed in a neutral environment; and
- legal bias – in favour of the host government – in contract enforcement.

The Dhabol dispute in India, in which the investing consortium argued that the Government of India had reneged on a performance guarantee, is an interesting example of something that the Indian courts sought to opine on in favour of the government of India. The disputes went on for a period of time, until a series of bi-lateral investment treaties (BITs) between India and other countries were invoked to realise arbitration through an English court, where the case was decided within a reasonably short time (in favour of the investor).

3.2.2. Regulatory versus political risk

The main rationale for seeking to differentiate between political and regulatory risks, is the greater potential to insure the former – although the availability of PRI cover for infrastructure in many of the poorer countries in question is far from a foregone conclusion. To the extent, in fact, that even if they were to be differentiated, there would be no practical impact.

Indeed, whilst political risk can be literally interpreted as the ‘four perils’ described previously, in practice untangling political risk and regulatory risk is not straightforward. Amongst the sample of lenders and sponsors interviewed there seemed to be little distinction drawn between political risk and regulatory risk, the main reason for this being that very few regulators were seen as being free from government influence.

3.2.3. How does regulatory risk arise?

There are many causes of the regulatory risks set out above.

Economic

More often than not, particularly in the water sector, problems arose following unfavourable economic events such as a currency crises. As such the regulatory risk is often a derived risk. This leads to pressure for price increases, whether these are explicitly provided for in the contract or else as a consideration as part of a regulatory review.

Timing of introducing private sector participation

Regulatory risk can be exacerbated when the private sector is introduced to a sector, together with a regulatory framework, prior to key reforms being addressed, such as tariff reform. Tariff rebalancing should be achieved prior to private sector participation in a sector, but in practice it is often the private partner who is expected to implement tariff changes. A conflict of objectives arises whereby the investor is expected to push through tariff changes but the regulator is reluctant to support the change.

Regulatory autonomy

In theory, regulatory autonomy was seen to be a good thing by the respondents. The existence of regulatory autonomy alone was rarely seen to cause a problem – advisory regulators, for instance, can be a form of benign autonomous regulator.

A lack of regulatory autonomy was seen to give rise to greater regulatory risk because the regulator is not in a position to weigh up objectively the different rights of investors / lenders and consumers. Overall, there was considerable scepticism on the part of most respondents as to whether or not any regulators in developing countries were truly autonomous.

This lack of autonomy has arisen for a number of reasons, including:

- a lack of commitment on the part of government to create a truly objective regulatory environment;
- structural arrangements in which the regulator is housed with and reports to, the line minister;
- continued direct government funding as opposed to raising required monies from the regulated entities;
- regulatory personnel who were previously employed by a given sector utility, who:
 - may be supporters of sector restructuring / privatisation; or
 - take the opportunity to ‘get back’ at their erstwhile employer;
- as set out above, continuing government interference in regulatory decision-making; and
- in some countries, regulators being held personally legally responsible for the decisions that they make such that they could even be imprisoned if a judicial review found their decision to be incorrect (thus promoting a desire to err on the side of caution).

Regulatory discretion

Most respondents were concerned about regulatory discretion and saw it as one of the main drivers of regulatory risk. Any situation in which a regulator has the freedom to opine – particularly on prices – causes considerable concern.

Regulatory discretion occurs:

- because it is stipulated within an overall regulatory framework;
- as a result of it being provided for contractually (for instance, period review of key clauses); or
- due to uncertainty, in that neither the regulator nor other parties are precisely clear as to his powers.

There were few examples quoted, however, where autonomous regulators with discretionary powers were seen to have acted particularly capriciously – although this does not mean that this is not possible, particularly where the regulator may have strongly held political views; for instance, against privatisation. The one notable example of this occurring was in one of the Manila water concessions, where we understand that problems arose because the regulator was staffed by former employees of the public utility because they were deemed to be knowledgeable about the network, but their objectivity was lacking because of disagreements over sector restructuring.

On the whole, however, greater concerns seemed to be driven by situations in which regulators were:

- *Not autonomous, but with significant discretionary powers* (that is, under the influence of government). As might be expected, this was seen as one of the key problem areas. Typically, a regulator is pressured by government not to increase prices, which are either provided for by formula or supported by strong regulatory arguments and to find some arbitrary reason as to why such changes should not be applied.
- *Lacking the necessary skills to undertake their jobs properly*. The level of competence within the regulator influences the operator's perception of regulatory risk. If the staff are technical, knowledgeable and perceived to be independent of political pressure then there is a greater willingness to enter into a contract. The lack of suitably qualified staff was noted by large numbers of respondents as a key cause of regulatory risk.

3.2.4. Sensitivity of individual components to regulatory scrutiny

Tariff levels were more or less unanimously seen as being the most sensitive to regulatory scrutiny. Not surprisingly, an inability to increase prices to cover increased costs will ultimately lead to insolvency. Highly geared project companies undertaking green-field investments are much more sensitive to price shocks, than established, privatised entities where investment requirements are likely to be relatively lower. Project financing structures tend to be brittle structures, with limited room for changes in behaviour / performance by any of the entities. Senior lenders, whilst being least at risk (as they rank senior to others in any insolvency situation) will still require a number of highly restrictive covenants to be entered into. The concept of wide-ranging regulatory discretion is very much at odds with this.

Regulatory discretion was seen as being less of an issue as regards investment obligations. Indeed, often it is the operator/investor who chooses to fail to meet investment targets specified in the contract for various reasons. For example, in Tanzania there have been several cases where investment expectations have not been met due to ambiguous interpretation of the contract in the telecoms and water sectors.

One sponsor observed that interestingly, from the perspective of regulatory risk, concession contracts will normally stipulate a certain investment spend, changes to which have little impact as regards risk to the investor, whereas changes to tariff levels will create the greatest impact. In other words, risk would be reduced if it were prices which were largely formulaic and investment levels which formed the basis for greater regulatory discretion.

No other areas of regulatory scrutiny were mentioned as being highly troublesome to investors.

3.2.5. Incidence of regulatory risk

On balance, the respondents have suggested that regulatory risk can be an issue, but this is highly dependent upon sector, country and where the participant sits within the transaction.

Sectors and countries

Views on the importance of regulatory risk varied, both by type of respondent and by sector. Taking the latter first, as might be expected, sectors which impact consumers most directly for essential services, such as water and electricity, clearly appear to be most susceptible to regulatory risk. For sectors where there is a high expected commercial return, such as mobile telecoms, the perceived risk amongst investors is much lower. Investors are much more willing to take on unknown regulatory environments where the expected returns are high and the potential market is large with sufficient levels of immediate affordability.

It is not possible to distinguish the extent of regulatory risk by country as this varies widely even within the same continent; however, a country's credit rating is likely to have some impact. China has historically been a very risky investment environment, yet it has an investment grade rating and there is no shortage of investors. However, a robust regulatory track record can be important in reducing risk perceptions. For example, a country with a new regulator in a partially privatized industry will typically be perceived as creating a higher degree of risk than a country with a well established regulator in a fully privatised industry.

Respect for contracts is extremely important in this respect. At least one respondent suggested that in general, governments in East and Southern Africa have a respect for contracts and there are not many examples of project failure. The key problem in this region is the reluctance to make decisions. It can take longer to set up a contract because Governments are fearful of being locked into an unfavourable contract and this introduces regulatory risk where clear contracting procedures are not in place.

Lenders versus sponsors

All capital providers, whether lender or sponsor, will assess the basic project fundamentals (size of market opportunity, investment requirement and potential revenue stream) and will base their business decision on these factors and regulatory risk will be part of this assessment. Whilst lenders are more likely to seek to procure investment insurance than equity investors (see next section), because they do not have the same potential upside as equity investors, in reality they are also subject to much less risk. This is because equity is subordinated to debt so lenders are afforded more protection by the 'cushion' that equity provides. Second, in many cases, the debt may be directly guaranteed by governments, in which case governments will be reluctant to have the guarantee called – as result some equity investors have formed the view that governments are happy to cause equity problems, but would stop short of upsetting the debt.

3.3. Availability and adequacy of investment insurance

The specific issues covered in this section are:

- the sometimes limited availability of investment insurance to address regulatory risk;
- the adequacy of cover afforded by available products; and
- the extent to which regulatory risk represents a serious investment and / or lending impediment, when compared to other factors.

3.3.1. Availability of investment insurance

As with debt finance, many market participants and observers claim that there is no shortage of PRI for ‘good projects’. What is generally meant by a ‘good project’, however, is a robust foreign exchange earnings stream. Thus, as is seen today, there is no shortage of PRI cover for mineral extraction projects, earning foreign exchange revenues, even in some of the most difficult environments. Moreover, in the developing world, once infrastructure projects are reliant on government partners or subject to regulatory discretion, additional problems arise, not least the intertwining of political and commercial / contractual risks, which can make PRI policies difficult to draft. PRI providers do not want to become involved in covering what they see as being commercial rather than political risks. As a result they will often not provide the full PRI cover, particularly breach of contract. This can create a major barrier to capital flows because availability of investment insurance can be critical to securing investment and finance. Banks have traditionally required PRI as a minimum condition for making a loan.

In some ways, however, private sector suppliers have been increasingly adventurous in the providing different forms of investment insurance, whether this has been more traditional PRI products or, increasingly, structured trade products. Utilities in countries such as Turkey have been able to place bonds in international markets by using currency transfer risk cover to ‘pierce’ the sovereign ceiling; that is, achieving an investment grade rating for their bonds (over and above their host countries which were below investment grade).

There is, however, much less availability of PRI cover in sub-investment grade markets, where the official providers such as MIGA and bi-lateral Export Credit Agencies (ECAs) / Investment Insurers are more important suppliers of political risk cover than the private sector. However, ECAs will not necessarily provide cover as a matter of course. The UK’s Export Credit & Guarantee Department will only provide breach of contract cover on a case by case basis and will typically only consider ‘good’ projects in poorer countries (as set out, typically foreign exchange generating enclave projects).

Regulatory risk causes a particular problem, in that insurers are never quite sure whether or not to treat it as political risk. Many policies remain silent about it. According to one insurance broker if, however, an arrangement is structured appropriately it can be possible to

procure PRI, cover, even breach of contract, from the private sector. There are two preconditions for this to work. First, government has to be party to the underlying concession or other agreement – as such, in the case of an ‘independent’ regulation, the regulator has to be seen as a government entity. Second, there has to be provision for arbitration in a neutral – typically international – environment. This is because insurers will only pay out after there has been an arbitral award in favour of the investor / lender against the host government. Once the insurer has paid out, it will then seek to enforce its subrogation rights against the government that was deemed to be in the wrong and thus recover the amount paid⁹. The main barriers to this are that Governments are often reluctant to stand behind the decisions of regulators and they are often extremely reluctant to have cases heard against them in a foreign court.

Whilst, being important it should be recognised that investment will not take place purely on the basis of the availability of an insurance / guarantee. Investors and lenders see guarantees as ‘back stopping’ devices, to protect otherwise seemingly robust projects from unforeseen occurrences. As one Pakistani project financier eloquently stated: “we don’t lend on the strength of the security package”. Whether an investor goes ahead with a project first and foremost depends upon how they regard project fundamentals.

3.3.2. Adequacy of cover

Most PRI policies derive from the days of the 1950s, 60s and 70s where the main concern for, typically, manufacturing and natural resource sector investors, were losses inflicted by wars, confiscations/expropriations and an inability to remit funds. These were pretty straight-forward events to prove.

Breach of contract has become much more associated with project financing, including infrastructure investments. As set out, normally, these policies will only pay out following an arbitral process which determines that government has breached an undertaking¹⁰.

A series of disputes in the past few years, including Dhabol, but also the Argentinian crisis, have called into question the quality of PRI cover for both investors and lenders. One interviewee described how his company had to review the language of all of their PRI policies following the Dhabol dispute in which OPIC initially refused to pay out on a PRI policy, as the Indian courts initially found in favour of the Government of India (the provider of the support which the PRI cover was underwriting). Doubts over the adequacy of cover has produced a range of different reactions. Some large international banks have chosen to self insure. Other lenders have sought more comprehensive credit insurance as a means of providing greater protection against unforeseen eventualities. Many investors have

⁹ This may involve going back to the courts of the country in question. However, it may also be possible to recover amounts from government assets held internationally.

¹⁰ A major reason for this is that insurers do not want to have to determine themselves whether a breach has taken place as they do not necessarily have the in house skills to be able to do this.

sought to try to negotiate the wording of their PRI policies much more carefully. Others have walked away, especially from project financings.

Investors, in particular, have identified a number of issues with PRI policies. First, as discussed, private insurers can be reticent to provide cover for what they see as being quasi-commercial risks. To their view, this can include purchase or supply by sub-sovereign entities (for example, state-owned electricity transmission and gas supply corporations, upon which IPPs can be totally dependent). The tendency to date has been for insurers to cover non-payment in case of arbitral award. This remains a real grey area for most private insurers, but it means that it can be difficult to cover off some key risks faced in many projects.

Second, one investor argued that investors trying to improve the quality of PRI cover are hamstrung by the dominant influence of banks, who are the largest purchasers of PRI policies and the inflexibility of official providers. Investors and international banks approach PRI differently. To many banks, PRI is something that is required for credit committee approval and, as such, is something of a 'tick in the box'. As discussed, equity investors, who take the first loss are looking at policies much more carefully, to assess the cover that they are being provided. As the vast bulk of PRI insurance is purchased by banks rather than investors, however, they are the market to which brokers and policy providers are typically most responsive to. But as banks are less concerned about the detail of policies, they are less likely to support the greater needs of investors with PRI providers. Whilst this is the view of only one, albeit well informed investor, it is interesting as it is contrary to the typical stereotyped view of conservative bankers and 'gung-ho' sponsors / developers, but may be indicative of a now much more restrained developer/investor community.

In addition public providers of PRI (the multi-laterals as well as bi-lateral investment insurers) can be extremely inflexible in altering the wording of any policy, which is often issued on a 'take it or leave it' basis. In part, this is seen as reflecting a lack of financial incentivisation to win business on the part of those who work for official providers.

Third, there are some specific technical details in policies which can have profound effects, but which are not always clear. The first of these relates to the operation of 'denial of justice' clauses in policies have become increasingly relevant. This covers against the risk that the arbitration processes, set out in concession and other contracts, are frustrated by a host government. This need to be interpreted in the context of investors wishing to (i) ensure that any dispute will be heard in an independent environment and (ii) any award will be honoured / enforceable. Taking the example of a non-honouring of a sovereign obligation protection (commonly available in private PRI markets), whilst these may have a denial of justice clause, this does not necessarily stipulate the legal jurisdiction in which any arbitration is to take place. Thus, there can be an issue of obtaining the 'right justice'. Again, in the Dhabol case, higher level bi-lateral investment treaties needed to be invoked to address this, when the state government concerned, sought to have the case heard in an Indian rather than international court.

A second technical problem relates to the ‘date of loss’. Most PRI policies base the value of an award at the time of arbitration, not at the time that the original breach / dispute arose. As a result, a project company is quite likely, no longer to be a going concern, by the time the award is made. There are some instances in which damage can be limited through policies paying out before an award is determined, but typically not in infrastructure. This illustrates the potential attractions and importance of Bank’s PRG / L/C product.

Thus, cover for even more traditional political risks is seen as being far from perfect, although PRI contracts are becoming much more sophisticated than they have been historically. Where there is an underlying contract, it is possible to achieve some form of protection, although as set out in the section above, availability of cover can be very limited in poorer, sub-investment grade countries, especially for sub-sovereign risks such as off-taker risks. Denial of justice cover does have some relevance to protecting against poor enforcement of agreed regulatory mechanisms. However, a number of respondents noted that many governments are now reluctant to sign up to clauses which might see them in an international court and ultimately paying compensation for a breach of their obligations. The exception to this are the partial risk guarantee arrangements, entered into by a number of governments, which are discussed in the next section.

3.3.3. The impact of regulatory risk

At the moment it is difficult to assess the full impact of regulatory risk. According to market sources, demand from water and power sectors for PRI is very shallow – only a few international developers are on the scene and they often seek first and foremost home government support (through ECAs or otherwise) for their investments. As such, the demand for insurance products fluctuates from year to year and it is difficult to establish trends.

As per the discussion in Section 2, the extent to which regulatory risk impedes investment and lending relative factors, varies according to country, sector and investors or lenders.

Countries

In Africa, the key impediment to private debt/equity flows in sectors outside of mobile telecoms and natural resources, is the size of the domestic market and limited purchasing power. Investors are also deterred from involvement by the sheer magnitude of investment that is needed either to rehabilitate existing assets or for green-field development and this effectively puts Africa at the bottom of the list when investment opportunities are appraised in the global context.

A number of banks cited poor decision making ability and a lack of available local finance as key impediments to deal closure in Africa. Infrastructure deals which require long-term up front commitment, for example for a 15 year contract, can take up to three years to reach financial close, whereas the same contract might be completed much quicker in Asia or Latin America which would complete much quicker in developed markets.

As mentioned, China is an interesting example, however, where there are considerable regulatory and political risks, but investors are still eager to invest, even in more challenging sectors such as water.

Sector

Regulatory risk is generally not perceived as a deal breaker in projects with strong cash-flows with the risk being simply priced into the cost of capital. The view amongst some lenders is that perceived regulatory risk blocks only the marginal projects, where expected cash-flows are less strong. Against this, many operators (that is, equity investors), particularly in water and electricity distribution appear to be taking a considerably more conservative approach to investing now, in the light previous losses to regulated revenues. The inability to realise cost reflective tariffs is a major concern.

3.4. Preferred means of mitigating regulatory risks and potential impact

In this part of the consultation, respondents were asked how they would suggest mitigating regulatory risk and the extent to which new approaches might lead to an increase in investment flows to developing countries. This subsection therefore covers:

- the overall views of respondents as to the appropriate ways of mitigating regulatory risks; and
- whether improved mitigation of regulatory risks, particularly through new approaches, will improve long term capital flows into regulated infrastructure sectors.

3.4.1. Overall views on the approaches to mitigating regulatory risk

A number of ways of mitigating regulatory risk were discussed within the consultations, starting from how the potential for regulatory risk might be reduced in the first place, to looking at specific approaches to mitigating what remains. What was very evident was that the respondents did not believe that any single approach or new ‘magic bullet’ would be sufficient to address problems successfully. Rather, the strong message that emerges from these discussions is that the strategies that must be employed to address regulatory risk have a number of different pillars. As illustrated in Figure 3.1, these range from ensuring that project fundamentals are correct, through ensuring that the regulatory discretion is limited and ideally incorporated into well specified contracts, with government commitment being assured through PRI/PRG backstops.

Figure 3.1: Regulatory risk prevention and mitigation

<u>Project fundamentals</u>	<u>Legal / regulatory regime and performance</u>	<u>Contract specification</u>	<u>Guarantee back-stop</u>
Avoid currency / revenue mismatches through local financing	Ensure comprehensive legal framework	Specification of cost pass through	Importance of 'denial of justice' cover
Local investor involvement	Limit regulatory discretion	Incorporation of regulatory provisions into contract	Greater use of PRG structures
Explicit risk sharing schemes	Develop longer term regulatory capacity	Off-shore arbitration provisions	
Project structuring			

We consider each of these in turn.

Project fundamentals

Given the causation mechanism of economic shocks leading to political and regulatory 'events', reducing the impact of economic shocks was seen as being critical. In particular – at least in the case of water - local financing was seen to reduce the impact of unfavourable exchange rate realignments. Not only does this reduce the need for increasing tariffs when foreign exchanged costs increase due to exchange rate realignments, the fact that capital is local rather foreign may lead to less risk of a default than in the case of foreign capital¹¹.

Project 'localisation' can also be improved by bring local equity into projects as well as debt. A leading water company now recognises, the importance of forming consortia with local partners to enable better relationships at the political level and to serve local human resource needs. In more developed emerging markets, some lenders have now stood back from taking project risk leaving this to the local companies to which they lend at a corporate level. If a contract needs renegotiation, the political angle is likely to be less of a problem if local partners are on board.

Improving regulatory performance

Improving regulatory performance was seen by most respondents as being critical to creating a favourable investment environment. This should be based around long term policies of

¹¹ Note that the risks of default following the Asian crisis were much greater in Malaysia, where infrastructure was financed proportionately more by local banks in local currencies, than in countries such as Thailand and Indonesia where more projects were dollar finance by international banks. The greater potential for systemic risk arising from this (that is, the potential for collapse of the financial system due to such bad loans) ensured that Government undertook a profound policy of restructuring, which has subsequently served the country well.

increasing regulatory autonomy and capacity, whilst recognising at least in the short term, the need for limiting regulatory discretion.

Ensuring ‘independent’, adequate funding and regular training were seen as being prerequisites for effective regulation. Recruiting high quality professionals from a range of backgrounds; economists, lawyers and engineers will help build a regulatory capacity equipped to deal with complex tariff mechanisms, detailed contracting and drafting procedures and negotiation with leading sector operators. Many sponsors and lenders emphasised the need for cooperation and the exercise of “goodwill” between all stakeholders and this is best achieved where all parties are well informed about the industry, the project itself and have the “will” to make it work. Operators clearly stated that they find it far easier to work with an experienced and intelligent regulator than a nascent, under-resourced regulator¹².

Whilst increasing autonomy and building regulatory capacity in the longer term were recognised as being desirable, these were seen as being less important than clear restrictions on the extent of discretion, where there was a clear balance of responses in favour of restricting the discretionary powers of regulators. At a minimum, discretion needs to be constrained until the regulatory entity has established a track record of competency. There was some discussion as to whether this might be¹³:

- time limited – the most popular approach and already provided for in a number of contracts;
- whether it might be possible to make the extension of powers subject to certain competencies being gained, perhaps being certified through some form of external audit;
- limiting regulatory discretion to some of the more objective and less risky regulatory components, such as agreeing investment plans or, as above, opening up each regulatory variable over time to regulatory scrutiny; or
- limiting regulatory discretion all together, except where it is absolutely necessary and relying principally on contracts which may need to be renegotiated from time to time¹⁴.

¹² There is already empirical evidence to support the proposition that good regulatory governance does lead to higher investment outcomes. For example, Gutierrez (2003) has put together a regulatory governance index from a sample of 22 Latin American and Caribbean countries. The index is calculated on the basis of each country’s telecom laws and changes in the laws. He finds statistically positive direct effects of his regulatory index both on tele-density and on efficiency.

¹³ Whereas there was no consensus view on what the correct approach might be, it is worth noting that one investment insurer suggested that any form of political risk insurance, would only cover the period up to the regulatory review.

¹⁴ It is arguable that there is always a presumption in sector reform work that there has to be a regulatory body established. The need for regulators and discretion can vary considerably both across and within sectors.

Clear contract specification

There was a view, not just from the lawyers, that contracts need to be as thorough as possible, providing for as many outcomes as possible and stipulating the principles that should be employed in future situations which cannot currently be provided for.

As importantly, all contracts need clear dispute mechanisms / arbitration processes. These procedures need to take place within a neutral environment, preferably based upon international rather than local laws. However, even if local laws are adopted any arbitration would preferably occur off-shore. To a number of investors and insurers international arbitration is a must, despite its unpopularity with many developing country governments.

Greater use of development bank guarantees

Some of the issues associated with the cover of more traditional PRI products have been highlighted above; in particular, difficulties in gaining recognition of the political rather than commercial risks associated with sub-sovereign entities, date of loss issues (in which an award is made well after a project company has collapsed) and the need for arbitration to take place within a neutral environment. Much of the benefit of traditional PRI products – arguably including those supplied by MIGA – is limited to the denial of justice aspect of the cover (although, as noted there can be issues associated with getting the ‘right kind’ of justice) and the non-payment of an arbitral award (MIGA).

However, most of the more difficult issues can actually be addressed by the IDA PRG. The obligations of state entities can be covered, the World Bank’s involvement will help ensure a fair hearing of any dispute as it is trusted by all the parties and, in particular, the ability to provide liquidity to the investor company – through the L/C – prior to any arbitral award, is extremely useful¹⁵.

These properties were viewed as being critical to closing the Uganda investment. This illustrates the way in which a PRG can be structured within an overall security package, aimed at addressing regulatory and other political risks (for example, government non-payment). Globeleq, the sponsor, has stated that without the PRG, the project would not have gone ahead. The PRG has ensured sustainability of the project, given the considerable investment that has been signed up to. It is important to note, however, that the PRG is but one element in a careful structuring exercise, based upon the foundation of robust project economics. The Ugandan authorities are required to ensure that escrow accounts are kept in cash to the required amounts. It is only if these ‘fail’ that the L/C is drawn, addressing

¹⁵ Questioned about the availability of insurance products that pay out before an arbitral award is reached, one broker stated that while some insurers have recently drafted such policies they continue to be very problematic. The counterpart to the insured will almost always dispute the breach of contract or other action which has led the insured to claim on his policy and insurers do not want to get into the debate as to who is right in such a dispute – they simply do not have the required expertise to pass that sort of judgement, in particular within complex concession arrangements. The much more preferable outcome is to have a fast and robust arbitration process.

liquidity concerns. After this, other aspects of the ‘security package’ can also be drawn on – such as various MIGA protections. As such, the PRG fills the gap between what is required and what might be available through normal markets.

The main observation regarding the limited use of the IDA PRG arising from the market consultations was the limited knowledge about it and perhaps even more so the changes that have been made to the product. Unless someone had direct experience of its use, then awareness of it was vague at best. Thus, by extrapolation, there is a likelihood that key market participants such as PRI brokers who advise their clients on appropriate forms of insurance are unaware of what might be possible through the PRG. Whilst, in general, the private sector respondents were concerned about the bureaucracy and general lack of customer focus typically associated with dealing with public sector insurers, this would not necessarily act as a major impediment to the PRG’s uptake where there were no other alternatives. In the case of Uganda and Romania, the guarantees were arranged and agreed within six months, keeping pace with the privatisation process.

The need to create greater awareness of such guarantees, at least as a first step to increasing their uptake, is a theme that comes through strongly in a number of other reports, including the review of the AsDB’s PRG and more recently, an analysis by PricewaterhouseCoopers of the availability of International Financial Institution risk mitigation instruments, where a lack of knowledge of key risk mitigation products is cited as a key barrier to their uptake¹⁶.

3.4.2. New approaches and increasing flows of international capital

None of the respondents seemed to suggest that new approaches were required to address regulatory risk, at least not once the properties of the PRG were explained. As set out, there was a much greater emphasis on ensuring the lessons learned through previous experiences were incorporated into new investments. However, each situation is unique and it is important that the PRG – in terms of backstopping – can be applied flexibly within each situation.

Indeed, a recent report by the World Bank¹⁷ states that attracting back the private sector will require stronger legal, regulatory and institutional frameworks, more transparency in contracting and innovative financing structures to make projects less risky and improve returns for investors.

Ascertaining whether or not some of the suggested changes identified above will lead to a quantum increase in investment flows is far from straightforward. A number of factors go into making an investment and / or lending decision of which the issue discussed above are just one. The general outlook for PSP projects, in particular, needs to improve first.

¹⁶ Comparative Review of IFI Risk Mitigation Instruments and Direct Sub-Sovereign Lending. Draft Final Report. PwC Securities 2003.

¹⁷ Infrastructure in Latin America and the Caribbean: Recent Developments and Key Challenges, Marianne Fay, World Bank, 31 August 2005

Where sectors are potentially subject to political and /or regulatory risks, it would appear that a range of measures will need to be taken to safeguard investments. Overall, there is much less upside in these sectors – if returns are lower then it is important that the risks are also commensurately lower. Thus, whilst it is difficult to say whether the introduction of these policies, in themselves, would increase investment, without them it is difficult to see increased investment occurring, given the recent history of such investments.

There are some signs that traditional investors are re-entering markets, albeit slowly and conservatively. Most participants have learnt from the experience of the past ten years or so and are keen not to make the same mistakes. Previously, considerable faith was placed in internationally led, project financing structures which provided little scope for local involvement. In many infrastructure sectors the limits of these approaches are now apparent.

Regional and domestic companies are seen as being set to play an increasing role in private infrastructure provision, both in their own markets and regionally. They may employ very different forms of risk mitigation strategy to traditional foreign investors.

In some larger developing countries like India, new patterns of lending and investment are emerging. Larger domestic companies are beginning to take project risks as lead sponsors. International lenders are avoiding the projects themselves, but are lending at a corporate level to such local companies. The resultant financing costs to the borrower are less and potentially also to the project, especially where the local investor is better able to manage project risks than a foreign investor.

There is not much of a project role seen for the risk mitigating products of development banks in these circumstances. Where they will be more useful are in less developed environments, such as sub-Saharan Africa, where investors look to such institutions to provide them with confidence. This is as much about ensuring that an ‘event’ does not materialise as providing support when it does.

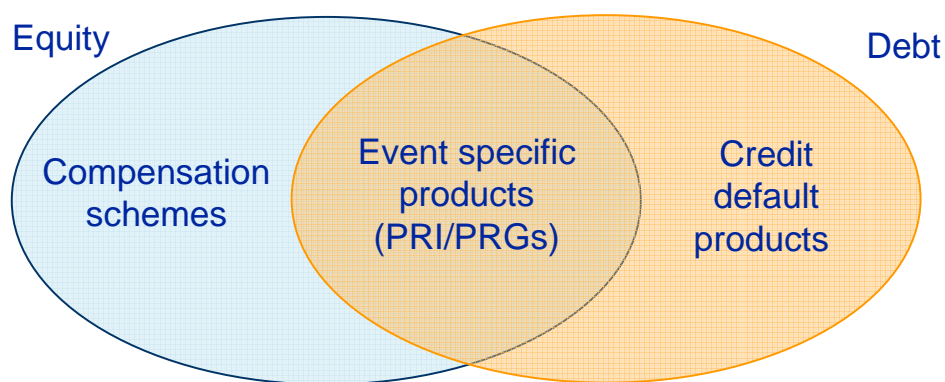
4. INTERVENTION OPTIONS

4.1. Introduction

Whereas the consultations considered the ways in which potential regulatory risk might be reduced as well as mitigated, in this section we focus specifically on some of the means by which regulatory risk might be mitigated by way of financial mitigants / approaches. This draws on and develops some of the observations made in the interviews, but given the complexity and detail which was not always possible to discuss with respondents, it is based on additional desk research and our own observations and ideas.

As illustrated in Figure 4.1 we have grouped potential risk mitigating mechanisms around those that are targeted directly on debt and equity¹⁸ separately and those which are common to both.

Figure 4.1: Equity versus debt risk mitigation



In summary, the pure debt products are largely based around protection from defaults on interest and principal payments, which are driven, but not necessarily, by regulatory events; event specific products – common to both debt and equity - which can be drawn on when the rules of the game are breached; and equity compensation schemes, where there is an agreement to protect equity interests in the event of unfavourable regulatory or other shocks to prices (tariffs) – which are unlikely to cause a default on debt. We consider debt and equity together first.

4.2. Debt and equity

The overlap in cover between debt and equity lies in the area of political risk products, including PRGs. These are products which can be drawn on where the rules of the game

¹⁸ Arguably, debt may also benefit indirectly from support provided to equity. The distinction provided is based around where the support is directly targeted.

have been broken in some way. As such they are backstops or approaches that will only be drawn on as a last resort.

As set out in Section 2, for purposes of addressing regulatory risk, the World Bank currently employs its PRG in two structures – a Limited Recourse structure for debt and an L/C structure for equity¹⁹. In the discussion that follows, we focus mainly on World Bank products, but supplement this, where appropriate, by reference to the products of other institutions.

4.2.1. Challenges to greater PRG usage

To date, the L/C structure has been used only twice. There are a number of reasons why there has not been a greater take-up. The first and most obvious, is that in the recent past there has simply not been that much privatisation or PSP activity generally within the electricity and water and sanitation sectors, whereupon a PRG might be required.

Second, there are some features of the instrument itself which remain unattractive, largely to governments, not least the need for a counter-guarantee, but also the IDA headroom that it takes up (even though this has been reduced significantly in recent years). Moreover, the more autonomous the regulator the more unsatisfactory it is for government to have to pay the penalty for any breaches on its part. However, if government is not willing to accept the regulatory risk – and, after all, it is government that has been ultimately responsible for creating the regulatory regime (even where it has been badly advised) – who else could or should accept the regulatory risk?

Third, it is important to consider the institutional set up by which such products are delivered to market. The departments within development banks responsible for products are typically not client facing, but rather support or ‘anchor’ groups²⁰. As such they often have to sell through operational groups rather direct to client. This contrasts with how most political risk protection is sold globally, whereby clients approach PRI brokers who advise on the most appropriate policy to take up. This is a further institutional difficulty in addition to the others faced by users of World Bank and other development bank products – the oft cited criticisms in this respect relate to the bureaucracy, time taken to process applications and lack of customer responsiveness displayed by a number of development bank staff.

In addition, to some extent, the private sector approach of which PRGs are a part, can be in competition with traditional, public sector led bank lending approaches. In other words, it can be a lot more difficult and costly to develop private sector approaches such as privatisation rather than lending to an existing utility through government. In the latter approach, the private sector might be involved through a management contract. For development bank officers who are typically incentivised to disburse, the added complexity

¹⁹ The PRG can, however, be used more widely to backstop a number of arrangements.

²⁰ In AsDB’s review of the lack of take up of its PRG product, a lack of appropriate marketing was specifically noted.

of arranging guarantees can be very unattractive. As a result, there is a significant challenge in ‘mainstreaming’ the PRG, which arguably represents one of the greatest challenges to its use.

4.2.2. Potential solutions

As there is not much that can be done directly to increase the flow of PSP projects, any interventions need to focus on the second and third points.

Making PRGs more attractive to host governments

As set out, the utilisation of IDA headroom, thus preventing it to be used for other purposes is still something of an issue. Arguably, there should be some charge or provision made, although it is not clear whether 25% of the amount of the cover is appropriate or whether, for instance, this might change from situation to situation. Unlike IBRD, all IDA exposures are 100% cash collateralised or provisioned against. This is an extremely conservative policy, especially as the exposures are to governments with tax raising powers. Reducing the required provisioning on PRGs to 25% reflects the fact that the exposure is to only country/political risks as opposed to full credit risks. Whilst this will no doubt have increased the relative attractiveness of guarantees as opposed to loans, there may be an argument for reducing the scoring even more, to perhaps 10%. This might be considered if the reduction to 25% is found to be insufficient.

An alternative would be for donors to discuss with the World Bank whether it is possible for them to compensate for this cost through funding ‘additional headroom’. It would also be necessary to discuss what would happen to the additional funding provided in the event of a call on a guarantee – it might be presumed that this would be drawn on by the World Bank, at least until it was reimbursed by the government in question. In other words, however, the government in question would still bear the full risks of having to pay out.

A more involved and potentially expensive approach would be to ‘risk share’ in co-guaranteeing the counter-guarantee / indemnification provided by governments to the World Bank. Thus, in the event of a guarantee being called and the World Bank paying out and seeking reimbursement from government, the costs of such a reimbursement would be paid out of donor resources. Clearly, this would represent much greater exposure on the part of donors providing such support and could create the potential for moral hazard. If governments are not on the hook for sufficient amounts, it may suit their purposes to ‘game’ the situation; that is, in certain situations it may be worthwhile to breach a contract as someone else will be paying for the costs of doing so.

Marketing and promotion of PRGs

Notwithstanding the above, there may be some situations in which such risk sharing was appropriate. For instance, where a regulator was genuinely independent, such that government had no control over its actions. If this were to be the desired construction of the regulatory framework, then such an arrangement might help incentivise it. If IDA were to be

part of this risk-sharing a way of funding the payout to the guaranteed entity would be to be found. Subtracting this from the country's future IDA allocation or the IDA allocations of others would clearly be unpopular. It might, however, be acceptable to fund out of IDA reflows; that is, interest and principal repayments from IDA borrowers.

Improving the external marketing of IBRD/IDA products will best be approached in conjunction with MIGA. There may be considerable mileage in a joint marketing of MIGA/IBRD/IDA products to the relatively limited number of specialist PRI brokers who exist. As set out, there is only very limited awareness of the PRG, even if it is an instrument of last resort, it would be really useful to make brokers more aware of the PRG's attributes, particularly its design flexibility when compared to many other products.

Whereas a number of World Bank instruments and approaches have dedicated funding support (for example, PPIAF for general PSP approaches, DEVCo for transaction support, GPOBA for OBA), there is no dedicated trust fund that the guarantees department can draw on to help buy down the costs of mainstreaming their instrument. Such funds could be used for marketing and for paying for internal and external specialists to help structure PRG (and possibly PCG) approaches. Such an approach might be piloted within the World Bank, but there are strong arguments for ensuring that such funds could also be drawn on by other development banks, who might also be struggling to mainstream such products. An alternative approach might be to dedicate some PPIAF resources to this end.

Buy-out schemes

In the extreme total buy-out schemes that enable investors and lenders to recover the value of their investments in defined circumstances where the government and/or regulator breach the terms of an investment agreement, could also be employed as a means of addressing regulatory risks. Whilst these are mentioned in the ToRs as a possible option, it is clear that they would be something of a nuclear option, costing either government or customers considerable amounts. No investor or lender mentioned them as a possible means of mitigation. The closest was one lender who was keen on on-demand guarantees being available which could be called in the event of a regulatory event without the need for an arbitral award.

Arguably, if there was full cost recovery, investors and lenders would be likely to revert to them at the first sign of problems. The 'partiality' of the PRG, which would also pay out if key rules were breached, would be more likely to be used as a last resort.

4.3. Debt

In addition to the tailored political risk products that are available to both debt and equity, lenders / bond holders can also access credit guarantees, which transfers a proportion of the credit risk to the provider of the guarantee. Normally, such guarantees are partial in that they only cover a proportion of the principal and interest exposure and the later maturities (although this latter point is not a requirement). As set out, the difficulties in unpicking

political and regulatory from commercial risks can mean that lenders are considerably more comfortable with more comprehensive cover than event specific insurances.

4.3.1. Challenges to greater PCG usage

As set out, there are a number of providers of PCGs. The product has not, however, been deployed as widely as might be desired.

Ideally, PCGs should be used to promote greater local currency financing of projects, which as discussed above, will help insulate them from a number of economic shocks. Whilst a number of DFIs/development banks claim to be able to offer such support, actual provision has been much less. Some of the reasons for this revolve around the credit quality of the parties to be guaranteed by providers of PCGs, other issues are institutional – there are just not the number of people in the DFIs and development banks who are dedicated to promoting the instrument. These difficulties were behind the creation of the PIDG initiative, GuarantCo, which has been established as a dedicated supplier of local currency PCGs.

The IBRD PCG has focused on supporting parastatals in raising international capital, the product not being available via IDA. It also requires a counter-guarantee from government which reduces its attractiveness.

4.3.2. Possible initiatives

There are arguments that some of these conditions should be relaxed and that the instrument should be used more flexibly. First, it should be available to IDA countries and not just for enclave projects (that is, typically foreign exchange generating projects already covered by IDA-enclave guarantees). Second, it should be made available to private sector as well as public sector projects.

In enclave projects, the PCG is provided to foreign banks extending foreign exchange loans to foreign exchange generating projects. There can, however, also be attractive, local currency generating projects (for instance, mobile telephony), which could be financed more efficiently by local currency. Greater use of the Bank's PCG could do much to mobilise local funds.

Such greater use does, however, raise a number of institutional and other problems. For instance, the World Bank itself – as a government lender - does not really have the credit assessment skills to undertake commercial projects – this is typically the role of the IFC who, unlike IDA, are not the providers of subsidised finance. There is then the issue of commercial risk and with which party it should sit – currently it sits with government due to the provision of a counter guarantee (as with the PRG).

The credit assessment problem is currently addressed by the full indemnification by the host country government. If the entity is publicly owned there is some logic to this, in the same

way that political risks within a government's control should likewise arguably sit with it. Given World Bank statutes which effectively require a host government guarantee on any extension of credit or provision of a guarantee to third party, it is difficult to see how the need for a counter guarantee could be reduced. As with the PRG, however, a reduction in the level of scoring against IDA headroom, could make it more attractive for government to use its IDA allocation to raise private capital (through IDA providing PCGs) than government borrowing from IDA. Government would, however, be ultimately liable for any payouts under the PCG, following a default on the loan. Unlike a PRG, such a payout would not require any form of event to be proven, other than the default on the interest payment.

The inevitable risk assumed by government through the counter-guarantee arrangement could, however, be used to leverage more capital if it were willing to assume a first loss on any default. As the pricing of an 'IDA PCG' would be heavily subsidised, it would provide considerable scope to other providers of PCGs whose risk – and consequent pricing – would be commensurately reduced. It is possible that the provision of a relatively small 'first loss' position, could leverage considerably more in the way of 'second loss' guarantee capacity. In addition, whilst the government would retain risk, the 'soft' guarantee provided by World Bank involvement would help reduce chances of default and would create greater confidence amongst other transaction participants who should also all be left with some risk.

There could be considerable potential for combining a subsidised, first loss, 'IDA PCG' with IFC's commercially priced, local currency PCG as a form of joint venture. To some extent, the IDA and the host country government, could also rely on IFC's greater experience in credit assessment, although it may be wise to seek additional advice where, as in a first/second loss scenario, different risks are faced.

Again, as commercial risk will be, to a considerable extent, outside the control of government, there may be arguments for risk sharing in terms of providing a counter guarantee. The same issue as to who would co-fund the counter guarantee arises, with the same potential solutions.

4.4. Equity focused risk mitigation

The specific approaches focused on equity risk mitigation involve situations in which tariff changes are called for but in which the rules of the game have not been breached, specifically:

- where some explicit compensation arrangement is established to recompense the operator for regulatory decisions; and
- where the full implementation of an agreed tariff change, for instance, resulting from an economic shock would be unsustainable.

Moreover, these arrangements are targeted on protecting equity returns, which can be considerably depressed, even though the debt in the transaction is secure. The key issues to determine in these instances are:

- who ultimately pays for any revenue shortfall; and
- who might finance it in the short term.

As set out in Table 4.1 there are a number of ways in which these schemes can work.

Table 4.1: Equity risk mitigation

Approach	Who pays?	Who finances?	Description
Deferral accounts	Users or government	Operator	Foregone revenues are kept track of and are either paid by customers or else government at the end of the concession life
Concession extension	Users (or government where government is a purchaser)	Operator	An approach sometimes used within the roads sector in which the concession life is extended so that the operator can obtain the IRR / net present value originally bid
Government compensation	Government	Government	Agencies can be set up to pay operators where a regulatory agency reduces the tariff from an agreed amount (eg India / roads), or if it is politically difficult to pass through full cost increases payments (subsidies) may be made directly to the utility
Buy-out	Government / users	Government	Government undertakes to buy-out the investor should certain eventualities occur (debt may have to be dealt with separately)

4.4.1. Key issues facing approaches

The key issue facing these approaches is government payment risk, particularly if this is a long dated. For instance, in the case of deferral accounts, government may be required to pay out any short-fall at the end of the concession period, if it is not possible to recover the deficit amounts from users.

Where sub-sovereign agencies are charged with supplementing user charges there will be payment risks associated with the creditworthiness of the entity.

4.4.2. Potential solutions

Such government payment risks have also been encountered in work involving output-based aid subsidies²¹. Irrespective of this, the same solutions that have been constructed for OBA would be relevant in mitigating some of these payment risks. These have utilised escrow arrangements, letters of credit backed by special commitments and PRGs where the payment requirements have been long term.

As such, most have involved the use of World Bank products. Possible solutions would include those high-lighted in Table 4.2.

Table 4.2: Potential compensation schemes

Approach	Who pays?	Who finances?	Potential solution
Deferral accounts	Users or government	Operator	<ul style="list-style-type: none"> • Government places an increasing amount of the short-fall in escrow as the end of the concession approaches • Government obligation is backstopped by a PRG²²
Government compensation / payment stream	Government	Government	<ul style="list-style-type: none"> • Letters of credit backed by special commitments can be set up which can be drawn on in the event that an agency fails to pay out • Escrow accounts can also be built in to structure

More detail on deferral accounts is presented in Box 4.1.

²¹ If government ‘subsidy’ payments were made conditional on verifiable performance, they would meet OBA criteria See: OBA: supporting infrastructure delivery through explicit and performance-based subsidies.

²² Long term credit enhancement is discussed in ‘Enhancing the credit of output based aid’

Box 4.1: Deferral accounts

A deferral account is a mechanism that records a shortfall in revenues between what should have been allowed under an unconstrained cost of capital regime and what has been actually been charged to customers due to constraints imposed by the regulator (or sometimes constraints self-imposed by the utility and approved by the regulator).

The amount that enters into the deferral amount is the revenue shortfall caused by the utility charging lower tariffs in a particular period than would have been allowed on a reasonable cost recovery basis. Under North American utility regulation this frequently occurs when a new asset comes into operation when the increased return on rate base, coupled with the increased regulatory depreciation, would cause a significant “rate-shock” to the users.

Revenues deferred in this manner are, in effect, added to the rate base and attract a return of capital. At some later stage, if the deferral account is to be amortized, the tariffs will have to be in excess of the recovery of cost recovery in the period.

The circumstances in which a deferral is affected can be subject to regulatory discretion or based on a certain pre-agreed price path for the tariffs. Generally under a sound regulatory system with regulatory commitment the utility may request that revenues are deferred in order to keep tariff low initially and encourage system-wide demand growth.

Generally practice has been to disaggregate the deferral accounts into specific causal amounts. For example the National Energy Board in Canada will often allow specific deferral accounts for foreign exchange movements or an unexpected tax increase.

Such a mechanism could be a useful tool for emerging market regulators and utilities to allow for a staged and, therefore manageable, increase in tariffs by the regulator but maintaining regulatory certainty for the utility. In the emerging market context a counter-guarantee to support the ultimate amortization of the deferral account may be required to give further credibility. In particular repayment of the deferral accounts in the event of an early project termination may need to be counter-guaranteed.

In applying such a tool regulators will need to be careful that the “cost-of-carry” caused by the delay is acceptable. The delay in amortizing the deferral account should not be too prolonged, since as the project company repays its debt the weighted cost of capital may rise as the equity percentage increases relative to debt. Under a reasonable deferral account system the objective will be to amortize the deferral over a finite and known time period.

4.5. PRI cover for domestic investors and lenders

Many development banks and DFIs have sought to encourage local debt finance through partial credit guarantees. They have also sought to protect local equity investors against government payment risks through the provision of escrow accounts and other arrangements. However, there has been much less focus on making traditional PRI products available to domestic investors and lenders. MIGA, for instance, can only protect cross border loans and investments, and the ECAs / bi-lateral insurers are focused on the interests of their respective countries. It is unlikely that this will change in the short term.

In the light of this, there is probably a strong argument in favour of ensuring that domestic investors and lenders are able to benefit from the protections provided by the PRG structures. There would not, however, appear to be any specific restrictions against this happening.

4.6. Summary and evaluation

The potential interventions set out above are summarised in Table 4.3 below, which also sets out recommendations and priorities for action.

Issue	Potential solutions	Recommendation	Priority for action
Debt and equity			
<i>Take up of PRGs</i>			
Use of IDA headroom	<ul style="list-style-type: none"> Creation of compensating headroom 	<ul style="list-style-type: none"> This may be worth looking at, depending upon how biting a problem it really is 	Low / medium
Provision of counter-guarantee	<ul style="list-style-type: none"> Sharing of counter-guarantee 	<ul style="list-style-type: none"> Only on a case by case basis and most likely in exceptional circumstances 	Low / medium
Lack of PRG mainstreaming	<ul style="list-style-type: none"> Provision of TA fund to help mainstream instrument 	<ul style="list-style-type: none"> Probably the obvious place to start 	Medium / high
Poor marketing	<ul style="list-style-type: none"> Joint marketing of IBRD/IDA and MIGA products to PRI insurance brokers 	<ul style="list-style-type: none"> Immediate priority 	High
Debt			
<i>Take up of PCGs</i>			
Exclusion of IDA countries for World Bank PCG	<ul style="list-style-type: none"> Extend provision to IDA countries 	<ul style="list-style-type: none"> Should be considered 	Medium
Focus on public sector borrowers	<ul style="list-style-type: none"> Review potential for private sector use 	<ul style="list-style-type: none"> Should be considered 	Medium
Provision of counter guarantees	<ul style="list-style-type: none"> Counter-guarantee risk sharing 	<ul style="list-style-type: none"> Consider on a case by case basis 	Low
Equity			
<i>Adoption of deferral accounts</i>			
Reliability of back-end payment	<ul style="list-style-type: none"> Provision of back end partial risk guarantee 	Build on approaches developed under OBA	Medium

Issue	Potential solutions	Recommendation	Priority for action
<i>Government payment agency</i>			
Creditworthiness of entity making payments	<ul style="list-style-type: none"> • Use of L/Cs backed by PRG or special commitment 	Build on approaches developed under OBA	Medium

5. CONCLUSIONS

The approach to the study has been to test the hypothesis set out in the Introduction to assess the extent to which the views expressed are supported by the views of a cross section of market participants as well as further desk research. Overall, the study has tended to support the hypothesis and emphasised the actions that will be needed to address regulatory risk in future, namely:

- Focusing on project fundamentals to improve the robustness of projects, so as to reduce the likelihood of unfavourable changes to tariffs – whether by regulatory contract or decision – having to be made.
- At least in the short run whilst regulatory capacity is being developed, reducing discretion through ‘regulation by contract’ approaches.
- Ensuring that investors and lenders are able to settle any arbitrations in neutral environments, free from political interference.
- Persuading governments to back-stop guarantees, such that PRI products and in particular, wide-ranging protections such as the PRG can be utilised more widely to address regulatory risk.
- As there is a relatively limited awareness of the potential to use PRGs in backstopping risk mitigation structures for both equity and debt, exploring means by which the use of the product(s) can be better mainstreamed within the World Bank (and potentially other development banks) and creating a greater awareness of its attributes within wider PRI markets.

An initial task was to set out some of the key concepts underpinning the analysis, including project structuring and the different dimensions of independent regulation which have been seen as increasing regulatory risk.

In the past, arguably a mistake has been made of trying to apply developed country regulatory models to evolving developing country environments which are not receptive to strict rule-following systems. To some extent, this is now even accepted by many who promoted these models in the first place. It is imperative that the regulatory set-up is tailored to specific environments, recognising the sophistication of the existing legal framework, the capacity of personnel within country to carry out regulatory functions and the culture of the country in terms of adhering to contracts.

Regulatory discretion, whether this be practised by autonomous or non-autonomous entities has no doubt increased risks – especially in sectors such as water and electricity distribution where the public are most sensitive to price increases. In more robust sectors, such as cellular telephony, the importance of regulatory risk is much less. It is also more

pronounced in poorer, sub investment grade countries than say, countries such as China which are subject to a foreign investment boom.

As regulatory risks have typically been seen as quasi-political by investors and lenders, they have sought to mitigate them by PRI products. Such products have, however, been found to come up short even in mitigating even more straightforward political risks, where there is a lack of clarity between what are political and what are commercial risks.

The starting point for mitigating regulatory risk is to ensure that there is a clear contractual underpinning to a given arrangement, which sets out the respective responsibilities of all parties. This 'regulatory contract' may take the form of a concession or other contractual arrangement, license, or a specially created government support agreement. Even in more difficult environments, as long as the host government is willing to back-stop the performance of the regulator, the World Bank PRG mechanism can be introduced.

There is no real case for a new instrument, because it is already flexible enough to be applied to a wide range of situations. There is, however, a strong case for ensuring that the use of the PRG is more mainstreamed, particularly within the Bank. Unlike other innovative products, it does not have access to technical assistance funds to help aid its marketing and uptake.

Whilst investors and lenders are well pre-disposed to this instrument, it should be seen as a back stop to carefully project structuring and a well specified regulatory regime, which is explicit in constraining regulatory discretion. In the longer run, the jury is still out over the precise balance in different contexts that might be achieved between contractual requirements and flexibility introduced through regulatory discretion.

The need to counter-guarantee the World Bank is likely to remain, with the ultimate risk lying with government. Where governments have a high degree of power over the actions of regulators, this is arguably highly appropriate. The case is less clear cut when regulators are more genuinely independent. At the end of the day, however, someone has to pay and if it is not government, it is difficult to see who else will. There may, however, be certain situations in which the World Bank or other donors are prepared to risk share.

It is, however, unclear as to whether the introduction of these measures, in themselves, will reignite international private sector enthusiasm in investing in developing countries, given generally unfavourable experiences to date. They should, however, be seen as being minimum conditions. Whilst there are some signs that international sponsors are once more beginning to consider developing country opportunities, it is not difficult to see that local regional investors may end up playing a much greater role and the financing structures that will increasingly be seen in future will differ from the project financing structures of the 1990s.

Bibliography

T Bakovic, B Tenenbaum and F Woolf, Regulation by Contract, A New Way to Privatised Electricity Distribution, World Bank Discussion Paper No 7, May 2003

M Cockburn and T Yapp, OBA Payment Mechanisms and Risk Mitigation (2004). GPOBA.

J Cubbin and J Stern, (WIP, unpublished), Regulatory Effectiveness, The Impact of Good Regulatory Governance on Electricity Industry Capacity and Efficiency in Developing Countries, 2005

GPOBA, “OBA – supporting infrastructure delivery through explicit and performance based subsidies” GPOBA June 2005.

Gupta, P, Lamech R, Mazhar F and Wright J, “Mitigating regulatory risk for distribution privatization – the World Bank Partial Risk Guarantee, Energy & Mining Sector Board Discussion Paper Series Paper no 5 November 2002.

Gutierrez, L. H, “The effect of endogenous regulation on telecoms expansion and efficiency in Latin America.” Journal of Regulatory Economics 2003

Guasch, Straub, Laffont, “Renegotiation of concession contracts”

Fink, C, Mattoo A & Rathindran R, “An Assessment of telecoms reform in developing countries” World Bank Working Paper No 2909

M Klein, Bidding for Concessions, the impact of Contract Design, World Bank Public Policy for the Private Sector Nov 1998

PwC Securities, Comparative Review of IFI Risk Mitigation Instruments and Direct Sub-Sovereign Lending. Draft Final Report, 2003.

Stern, J & Holder, S., “Regulatory governance: criteria for assessing the performance of regulatory systems. An application to infrastructure industries in the developing countries of Asia.” Utilities Policy 1999

Stern, J., “Regulation & Contracts for Utility Services: Substitutes & Complements” Lessons from UK historical experience.” LBS Regulation Initiative Working Paper 2003

Von Klauy, S, “Enhancing the credit of OBA”. GPOBA Working Paper Jan 2005

APPENDIX A: LIST OF INTERVIEWEES AND ORGANISATIONS

Interviewee	Organisation	Perspective
Nick Rouse / Sophie Bianchi	Emerging Africa Infrastructure Fund	Lender
Nathan Mintah	HSBC	Lender
Judith O'Neill	Greenberg Traurig	Legal Advisor
Uday Mathur	CEPA /Ex Bechtel/Alterra (airports)	Developer
Luca Buljan	Globeleq	Developer
Tony Clamp	Infracore / ex IFC / Thames Water	Developer
Andrew Bainbridge	Barclays	Lender
Nick Robson	JLT	Insurance broker
Bernard Tenenbaum	World Bank	Regulator / Development Banker
Alain Mathys	Suez Environment	Developer
Dianne Rudo	Ex OPIC / Taylor de Jongh	Insurer / Financial Advisor
Paul Radford / Peter Ball	Export Credit Guarantees Dept UK	Insurer
Farida Mazhar	World Bank	Development Banker
Cliff Stone	Biwater	Developer
Paul Aird	Bechtel	Developer
Anton Eberhard	Independent	Academic
Oliver Blackaby	NM Rothschild & Sons	Financial Advisor / Lender
Chris Wyman	Clifford Chance	Lawyer
Richard Farmer	Thelen Reid and Priest	Lawyer
Jonathan Berman	Deutsche Bank	Lender
Richard Wheeler	Willis	Insurance Broker

APPENDIX B: CONSULTATION DOCUMENT