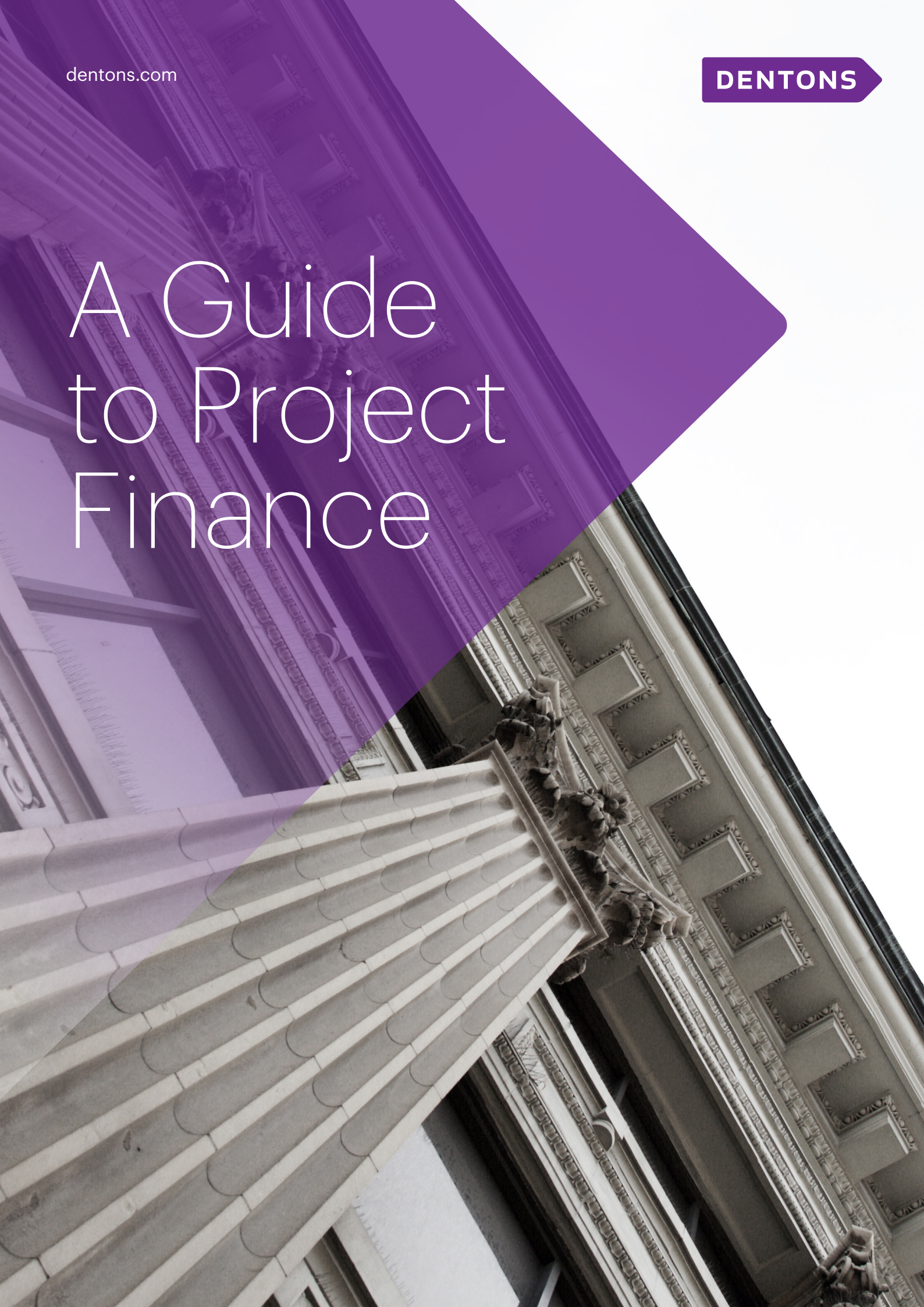


# A Guide to Project Finance



# Foreword

Since the last edition of this Guide in 2004, the use of project financing techniques as a means of financing large-scale infrastructure projects has been severely tested by the global financial crisis of 2007/8. Financial market conditions remain more stringent than those seen before the financial crisis. This has led to a decline in project financing in some of the countries previously considered to be the strongest supporters and users of project financing techniques, which, in turn, has led to the increasing prominence of certain emerging economies.

Project financing techniques continue to enjoy popularity in Europe. Western Europe maintains the largest activity of any region globally, with 315 project financings recorded as having closed in 2010. The public-private partnership (PPP) model has struggled recently in what is seen as its most mature market, the UK. This may be explained by the change of government and recent policies revolving around austerity, which have brought some uncertainty to the PPP market. This has been marked by a decline in the number of deals, coupled with increased competition for capital from other European countries that are opening the doors to PPP schemes, particularly in Eastern Europe. The recent EU and IMF bailout of Portugal, Ireland and Greece may indicate that the next few years will be characterised by a slowdown in the levels of PPP activity in Western Europe, although there currently remain promising signs of continued growth.

In France, President Nicolas Sarkozy has supported spending on infrastructure as a remedy for the financial crisis, with the growing need to cut state spending resulting in the use of PPPs as a preferred method of delivering this. The recent development of a number of high-speed rail projects has led to PPP projects worth billions rather than millions in the country. With a large number of refinancings also in the pipeline in France, this could mean that the PPP market continues to flourish for some time. The year 2010 was a year when PPPs expanded into new areas in Germany, with Partnerschaften Deutschland (the government's PPP taskforce) tendering its first social infrastructure project, a 30-year concession to build and operate the new Ministry of Education and Science building in Berlin, alongside a number of hospital and leisure centre deals said to be in the pipeline in Germany. The Italian project finance market also showed promising signs in early 2011, with the first project financing in Italy of the Strada dei Parchi reaching financial close and signalling a potential wave of Italian road PPP deals. Despite Spain's economic difficulties, PPP deal flow has remained relatively consistent, with several infrastructure deals reaching financial close in 2010. The main challenge faced appears to be an internal one for Spanish lenders, which now face much stiffer competition in the face of renewed competition from foreign lenders.

Bolstered by the US\$7.6 billion Nord Stream project, Eastern Europe saw significant levels of growth in terms of value, with project financings worth US\$19.9 billion in 2010, up 84 per cent on 2009. In the last few years, private activity in infrastructure has been concentrated in Eastern Europe and Russia, marking a clear growth in the levels of investment in the region. Investment in Poland, Romania, Turkey and the Russian Federation represented 78 per cent of all investment in Eastern Europe in 2009. Eastern Europe's PPP activity has also flourished in these areas in particular. Several hospital PPP projects are currently in the market in Turkey, Poland, Romania and Moldova. The Romanian Health Ministry has also planned for two or three hospitals to be built in the country at a cost of €1.5 billion.

Recent political unrest in the Middle East region<sup>1</sup> appears to have turned a potentially promising time for project finance in the Middle East into a year that is somewhat more uncertain, with government projects for tenders likely to be delayed. Another factor in the balance of project financings is the limits on exposure that ECAs and banks are prepared to take in the region. Funding from international banks and ECAs is more in demand than ever, although figures suggest that oil-rich countries have proven to be best when competing for scarce resources. Despite the recent unrest, there have still been some promising developments in this region, with escalating oil prices helping the region to recover from the financial crisis. The value of project financings in the Middle East rose by 18 per cent to reach US\$32.7 billion in 2010. The value of project financings from Saudi Arabia alone reached US\$25.9 billion, the highest annual value on record, with two of the biggest financings globally coming from the Jubail Export Refinery and the Ras Az Zawr Aluminium projects. In light of the expected boom in PPP schemes, the United Arab Emirates began framing a PPP law towards the end of 2010, which is expected to be finalised during the course of 2011. Israel continues to upgrade its national infrastructure using PPP, with 20 PPP projects having been executed, totalling US\$9 billion of investment. However, it is thought that the real test of confidence for project finance in the region will be the success of financings in areas of the Middle East, such as Bahrain, that have been particularly affected by recent unrest. It remains to be seen whether the proposed PPP projects in these areas will be a success.

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<sup>1</sup> For the purposes of this foreword, the "Middle East region" includes the area from North Africa to the Gulf region (i.e. Morocco, Algeria, Libya, Egypt, Lebanon, Syria, Jordan, Israel, the Gaza Strip, Saudi Arabia, Iran, Iraq, Kuwait, Qatar, Bahrain, Yemen, Oman and the United Arab Emirates).

The year 2010 marked a steep fall in the volume of project financings in South America, with the volume of project financings falling by 56 per cent on the figure from the previous year. This marks a stark contrast to the previous few years, which saw South America experiencing strong growth, focused mainly on private infrastructure financing. In particular, Brazil saw investment grow by 26 per cent in 2009 and Brazilian projects accounted for 47 of the 69 new projects in South America and the Caribbean. Energy projects accounted for the most activity in the region in the same year, with Brazil again dominating thanks to 37 energy projects and 93 per cent of its regional investment funding such projects. Two mega projects, the Santo Antonio and Jirau hydropower plants, accounted for almost half of the investment in project financings in Brazil in 2009. The recent drop may be associated with the current political environment in South America, and in particular in Brazil, which has been seen as acting as a dampener of the strong levels of growth in project financings witnessed in previous years.

Whilst certain aspects of the political landscape in South America may mean certain international lenders are wary of increasing their exposure, South America still shows the most promise in terms of PPP investments. Brazil, Mexico, Puerto Rico, Chile, Peru and Colombia will be emerging markets to watch closely in the next few years. Several PPP deals with capital requirements of over US\$1 billion are currently in the market in Brazil and Colombia, with interests in roads, rail and the first PPP prison included. Puerto Rico has also shown signs of becoming a PPP powerhouse in the region, pursuing a broad agenda that includes roads, schools, water distribution, an airport and eventually a power plant. Evidence of this surge in PPPs was bolstered in March of 2011 when the Puerto Rican government procured a groundbreaking social infrastructure deal to award a 49 schools programme as part of its national PPP scheme.

In North America, California's Long Beach Courthouse, a US\$495 million project, marked the first availability-based social infrastructure PPP to reach financial close. The number of projects has grown steadily over the past few years, with deals worth US\$42.9 billion closing in 2010 in North America, although the US has not as yet managed to match the vigour seen in Europe when PPP schemes first emerged. Variations on project finance legislation amongst the states in the US is seen as somewhat more of a minefield than that seen in Europe. Coupled with this, there are a number of additional risk and financing issues. These invariably result in the need for higher project insurance costs that must be factored into new project financings in the region. Despite these issues, the revival of the bond market in the US and Canada is a good sign for longer-term PPP projects, balancing out financing between construction and operation phases. North America was the second largest market for PPP deals in 2008. Canada continues to use PPP projects as a way of supporting its growth in infrastructure, particularly social infrastructure and transport projects, with several big health care projects awarded since 2009. The election of a conservative majority earlier this year signals that further growth in PPP activity is likely to occur.

Asia has experienced a dynamic level of activity in project financings over the last few years. The volume of project financings was the highest on record in 2010, reaching a value of US\$129.8 billion. India led this surge in activity, with the KSK Mahanadi Thermal Power Project, at US\$3.4 billion, being the largest Indian project financing to reach financial close in 2010. With the Indian government committed to US\$12.7 billion for rail projects over 2011-2012 and with plans to build 25,000 km of rail by 2020, it is likely that this level of growth will continue. The Philippines, Singapore and South Korea show clear signs of growth. The government in the Philippines recently established a PPP centre, announced ambitious infrastructure plans and looks set to issue bonds in order to help to finance transport PPPs. The LRT Line 1 Southern Extension, estimated to be worth US\$1.56 billion, is one of a number of projects that the Philippine government hopes to bring to the market in 2011. Singapore closed a flagship US\$1.5 billion sports hub in 2010, marking completion of the world's largest sports facility PPP to date. It is likely that, owing to the environmental disasters that recently hit each of their economies, Australia, Japan and New Zealand will experience a reduction in their levels of activity. It is noteworthy, however, that Australia continues to be one of the most mature PPP markets, with the construction of the Royal Adelaide Hospital PPP, which is scheduled to be completed by 2017, marking one of the largest hospital PPP deals procured in the country yet. Australia has also managed to attract the interest of a number of foreign banks, signalling that confidence in its ability to deliver large-scale PPP projects is strong.

Infrastructure needs in Africa are estimated at US\$93 billion a year.<sup>2</sup> Currently, the region spends under half of that amount and significant investments in infrastructure are needed, with current investments lagging far behind those of other emerging markets. PPP activity so far in the region has been limited to a small number of countries in Africa, primarily South Africa and Nigeria. The N1/N2 Winelands Toll Road and Abuja Hospital in South Africa and Nigeria respectively are two noteworthy upcoming PPP deals in 2011. South Africa and Nigeria also have the largest number of PPP projects in the pipeline in the region, with others planned in Kenya, Mali, Reunion, Lesotho, Ghana

and Côte d'Ivoire. If these deals do go ahead, not only will they be landmark transactions in their countries, they will also potentially set a trend for similar project financing deals in the region.

Project financing continues to enjoy strong growth. Following the financial crisis, many countries have sought a greater role for the private sector, seeking to balance budgetary constraints against a desire to develop infrastructure, including investment in areas traditionally seen as the domain of the public sector. This growth has been supported by the introduction of legislation governing PPP schemes, particularly in emerging markets. Whilst market conditions have improved, it is clear that projects that are able to raise funding can do so only with more stringent conditions, such as lower debt/equity ratios, shorter tenors and more conservative structures. There has also been a move towards investment in larger projects, with projects worth US\$1 billion or more accounting for 50 per cent of investment in PPP projects in the first quarter of 2010. By sector, energy took the lead, with investments amounting to 33 per cent of flows to all sectors, whilst infrastructure's share was 31 per cent. Greenfield projects continue to be the best able to raise debt, although globally there has been a decline in the favourability of greenfield projects. Alongside this decline, there has been a growth in concessions and divestitures.

Project finance applications have broadened over the years to encompass greenfield projects in the "hard" sectors and "soft" infrastructure projects such as water and sewerage, as well as more extensively in the service sector. Where traditionally it was developed markets that led the way following the emergence of the PPP model, there has been a recent surge of activity in developing economies that evidences the importance of such financing techniques as a means of developing infrastructure. Where projects can stand on their own and where the risks can be identified up front, private funding through project finance offers potential. It is clear that the future for project finance remains a positive one.

**Neil Cuthbert**

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Dentons

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# Glossary Of Terms

“Bond”	A negotiable note or certificate evidencing indebtedness of the issuer to the holder.
“BOT Project”	A project structure involving (usually) a concession granted by a government (or government entity) under which a facility or project is built, owned and operated by the project company and (usually) transferred back to the government at the end of the concession period.
“Comfort Letter”	A letter issued by one person to another pursuant to which the issuer makes certain statements (usually not legally enforceable) concerning a facility, project or company.
“Concession Agreement”	An agreement (sometimes called a licence or lease) under which the grantor confers on the project company the right for an agreed period to exploit, develop, construct and operate for a profit a facility or project.
“Cover Ratios”	The ratio of a project’s discounted cash flow during a particular period(s) over the amount of project debt at a specified time(s).
“Direct Agreement”	An agreement entered into between (usually) the trustee/agent of the lenders and a party contracting with the project company pursuant to which that party gives certain consents, rights and undertakings to the lenders (e.g. consent to lenders’ security and the right to cure any defaults of the project company).
“Export Credit Agency” or “ECA”	The agency of a country that is established for the purposes of providing financial assistance to exporters of that country.
“Finance Lease”	A lease of plant or equipment by a financier to a lessee under which substantially all the risks and rewards of ownership are transferred to the lessee and the lessee is effectively paying, by way of rental, the financier’s capital outlay and a return on its capital.
“Financial Close”	The date when all documentary and other conditions precedent to first drawing under a project loan agreement are satisfied or waived.
“Floating Charge”	A security that is the creature of many common law jurisdictions under which the chargor grants the creditor a charge over (usually) all of its assets and undertakings. The principal characteristic of a floating charge is that it does not crystallise into a fixed charge until the occurrence of a particular event and, until crystallisation, the chargor can deal with the charged assets in the ordinary course of its business.
“Forward Purchase Agreement”	An agreement under which the lender will agree to purchase products from a project company and will make an advance payment for those products to the project company.
“Hedging Instrument”	An agreement under which a person’s currency or commodity or interest rate exposure is covered or offset with another person for an agreed period of time.
“Host Country”	The government of the country in which a particular facility or project is located.
“Joint Operating Agreement”	An agreement between two or more persons regulating their respective rights and obligations under a joint venture.
“Joint Venture”	An arrangement between two or more persons set up for the purposes of undertaking jointly a commercial venture and being an arrangement which is not a partnership.
“Limited/Non-Recourse”	Expressions used to define the extent of rights of recourse and remedies that a lender will have against a project company or sponsor usually only against a particular project’s assets.

“Limited Partnership”	A partnership consisting of one or more general partners and one or more limited partners. General partners are jointly and severally liable for the debts of the partnership on an unlimited basis, whereas limited partners’ liabilities are generally fixed by reference to their capital contribution.
“Loan Life Cover Ratio”	The ratio of a project’s discounted cash flow from the date of measurement up to the final loan maturity date to the amount of project debt at a specified date(s).
“Multilateral Agencies”	Agencies jointly set up or established by a group of countries for the purposes of promoting international or regional trade and economic cooperation, e.g. the World Bank, IFC, Asian Development Bank, EBRD.
“Offtake Agreement” and “Offtake”	An agreement under which the product of a facility or project is acquired by a third party (the offtaker), e.g. a Power Purchase Contract or Take-or-Pay Contract.
“Partnership”	A vehicle (whether or not incorporated) through which two or more persons conduct a business venture for profit and agree to share profits and losses of that venture.
“Performance Bond”	A bond (guarantee) given by one person (usually a bank or insurance company) to secure (by means of payment not performance) all or an agreed part of another person’s obligations under a contract, e.g. contractor’s obligations under a construction contract.
“Present Value”	The current value of a future stream of cash flows. This is achieved by applying a discount factor to those future cash flows.
“Private Finance Initiative” or “PFI” or “PPP”	An initiative of the UK Government under which the provision of certain public services, together with many of the associated risks of providing those services, as well as the funding requirements risks are transferred to the private sector.
“Production Payment”	A right to an agreed share of the future production of (usually) hydrocarbons or minerals from a facility or project in exchange for an agreed price.
“Project Life Cover Ratio”	The ratio of a project’s discounted cash flow from the date of measurement up to the end of the project’s useful/economic life to the amount of project debt at a specified time(s).
“Security Trustee/Agent”	A person (usually a trust company or bank) appointed by the lenders to hold on their behalf security in connection with a project.
“Special Purpose Vehicle”	A vehicle (usually a limited company or a limited partnership) established solely for the purposes of a particular facility or project.
“Sponsor”	A person who is involved (often with others) in originating and structuring a project and who will (usually) be a shareholder or owner of all or a part of the facility or project.
“Take-or-Pay Contract”	A contract under which a buyer agrees to take a service, product or raw material from a facility or project for an agreed period and price and to pay an agreed sum to the counterparty should the buyer be unable to continue to buy.
“Through-put Contract”	An agreement under which one party (the shipper) agrees to ship an agreed quantity of (usually) hydrocarbons through a facility such as a pipeline, usually on a “ship-or-pay” basis.
“Turnkey Construction Contract”	A construction contract under which the contractor assumes responsibility for the design, procurement, construction and commissioning of a facility or project.

# Section 1

## Introduction

### 1.1 Origins of Project Financing

With the explosion of project financing in the late 1980s and 1990s, both in Europe and around the rest of the world, there is a temptation to think that the financing of projects on limited or non-recourse terms is a relatively novel concept, and one for which the ingenious lawyers and bankers of the 1980s can take most of the credit. This is, however, far from being true. Indeed, there is early evidence of project financing techniques being actively used during Roman times and earlier still. According to the historians, sea voyages on the Mediterranean ocean were extremely dangerous adventures in Greek and Roman times, mostly on account of the dual perils of storms and pirates. As a result of these nautical perils, some risk averse merchants would take out a *fenus nauticum* (sea loan) with a local lender in order to share with that lender the risk of a particular voyage. The *fenus nauticum* worked on the basis that the loan was advanced to the merchant for the purpose of purchasing goods on the outward voyage, which loan would be repayable out of the proceeds of the sale of these goods (or more likely other goods bought overseas with these proceeds). If the ship did not arrive safely at the home port with the cargo in question on board, then according to the terms of the *fenus nauticum*, the loan was not repayable. At the time, this was viewed essentially as a form of marine insurance, but it can just as easily be classified as an early form of limited recourse lending, with the lender assuming the risk of the high seas and the perils that accompanied her. History also recounts that, in order to protect their interests, these brave lenders would often send one of their slaves on the voyage to ensure that the merchant was not tempted to cheat on the lender (an early ancestor of the security trustee perhaps!).

In modern times too there is plenty of evidence of project financing techniques being used by lenders to finance projects around the world. In the 19th century, lenders in the City of London were financing numerous railway and other projects in South America and India and investing in other overseas ventures that had many features of modern-day limited recourse lending. In most cases these loans were not specifically structured as limited recourse loans as we know them today, but the commercial reality was that this is exactly what they were.

However, limited recourse lending in the UK really took off in the early 1970s when lenders in the UK started making project finance available for the development of some of the early oil and gas fields in the UK continental shelf. The early projects that were financed on this basis were relatively few and far between as there was a relatively small pool of lenders prepared to finance projects on this basis. It would also be true to say that the treasurers of many of the companies operating in the UK continental shelf at this time took some time to appreciate the advantages of financing projects in this way. The first major financing in the North Sea was in the early 1970s. This was British Petroleum's Forties Field, which raised about £1 billion by way of a forward purchase agreement (see section 4.7 for a description of this structure). Shortly after this transaction two loans were raised by licence holders in the Piper Field (Occidental Petroleum Corporation and the International Thompson Organisation). Other financings of North Sea hydrocarbon assets followed and by the late 1970s and early 1980s what had started as a modest number of transactions had turned into a significant volume of project financings related to oil and gas fields, first in the UK continental shelf and then in the Danish and Norwegian continental shelves.

Much of the documentation and many of the techniques for these early oil and gas transactions were borrowed from practice in the US where adventurous bankers had been lending against oil and gas assets for many years. The significant difference in the context of the North Sea, however, was that bankers were in reality taking significantly more risks in lending against oil and gas assets in the North Sea. Not only were these brave bankers lending against offshore oil and gas assets where the risks were considerably greater (especially in the early days, given the new technology being developed and utilised), but they were also, in some cases, assuming all or part of the development/completion risk. Traditionally, in the early days of project financing in the US, loans were agreed against producing onshore assets, which carried a far lesser degree of risk. The North Sea was, however, an altogether more hostile and hazardous environment.

The 1980s in the UK saw perhaps the greatest growth spurt in project financing, with power projects, infrastructure projects, transportation projects and, at the end of that decade, telecommunications projects leading the way. This was continued throughout the 1990s until the more recent global financial crisis, which saw a huge growth in project financing, not only in Europe and the US but also throughout Southeast Asia and further afield.

## 1.2 Definition of Project Finance

There is no universally accepted definition of project finance. A typical definition of project financing might be:

“The financing of the development or exploitation of a right, natural resource or other asset where the bulk of the financing is to be provided by way of debt and is to be repaid principally out of the assets being financed and their revenues.”

Other more sophisticated definitions are used for special purposes; set out at Fig. 1 is an example of a definition used in a corporate bond issue. This illustrates the aims of the bondholders, on the one hand, to exclude from the definition any borrowings having a recourse element (since the purpose of the definition was to exclude project finance borrowings from the bond’s cross-default and negative pledge) whilst, on the other hand, the aim of the issuer to catch as wide a range of project-related borrowings.

### Definition of Project Finance Borrowing

Fig. 1

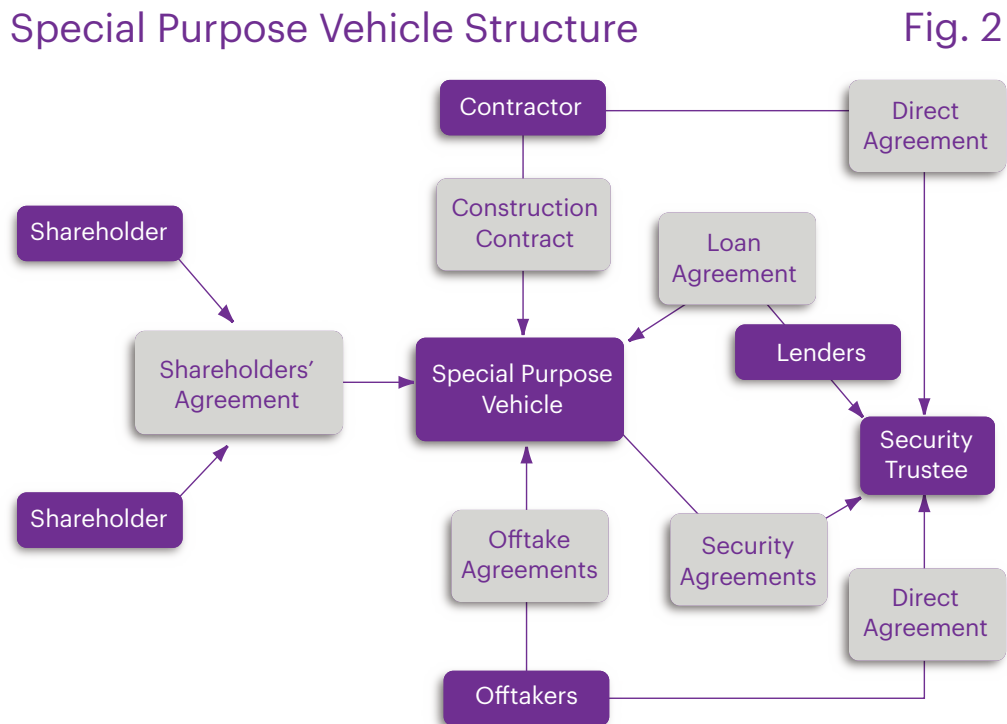
“Project Finance Borrowing” means any borrowing to finance a project:

- (a) which is made by a single purpose company whose principal assets and business are constituted by that project and whose liabilities in respect of the borrowing concerned are not directly or indirectly the subject of a guarantee, indemnity or any other form of assurance, undertaking or support from any member of the [Group] except as expressly referred to in paragraph (b)(iii) below
- (b) in respect of which the person or persons making such borrowing available to the relevant borrower have no recourse whatsoever to any member of the [Group] for the repayment of or payment of any sum relating to such borrowing other than:
  - (i) recourse to the borrower for amounts limited to aggregate cash flow or net cash flow from such project and/or
  - (ii) recourse to the borrower for the purpose only of enabling amounts to be claimed in respect of that borrowing in an enforcement of any security interest given by the borrower over the assets comprised in the project (or given by any shareholder in the borrower over its shares in the borrower) to secure that borrowing or any recourse referred to in (iii) below, provided that (A) the extent of such recourse to the borrower is limited solely to the amount of any recoveries made on any such enforcement, and (B) such person or persons are not entitled, by virtue of any right or claim arising out of or in connection with such borrowing, to commence proceedings for the winding-up or dissolution of the borrower or to appoint or procure the appointment of any receiver, trustee or similar person or official in respect of the borrower or any of its assets (save for the assets of the subject of such security interest) and/or
  - (iii) recourse to such borrower generally, or directly or indirectly to a member of the [Group] under any form of completion guarantee, assurance or undertaking, which recourse is limited to a claim for damages (other than liquidated damages and damages required to be calculated in a specified way) for breach of any obligation (not being a payment obligation or any obligation to procure payment by another or an obligation to comply or to procure compliance by another with any financial ratios or other tests of financial condition) by the person against whom such recourse is available or
- (c) which the lender shall have agreed in writing to treat as a project finance borrowing.

The overriding aim behind this rather complex definition is to make it clear that the repayment of the loan in question is, essentially, limited to the assets of the project being financed.

It should be noted that this Guide does not cover either ship or aircraft financing, although many financings of ships and aircraft are financed on limited recourse terms and could be said to be project financings. In many of these cases the lenders will, directly or indirectly, limit their recourse to the vessel or aircraft itself, its earnings (including requisition compensation) and its insurances. However, the financing of ships and aircraft is a specialised area and is not within the scope of this Guide. Many of the provisions of this section will, however, apply equally to the financing of ships and aircraft.

Set out at Fig. 2 is an example of a typical structure for a project using limited recourse finance in a special purpose vehicle structure.



### 1.3 Extent of Recourse

The expressions “non-recourse finance” and “limited recourse finance” are often used interchangeably with the term “project finance”. In strict terms, non-recourse finance is extremely rare and in most project finance transactions there is some (limited) recourse back to the borrower/sponsor beyond the assets that are being financed. As will be seen in section 6, this security may amount to full or partial completion guarantees, undertakings to cover cost overruns or other degrees of support (or comfort) made available by the sponsors/ shareholders or others to the lenders.

It may even be that the only tangible form of support that a lender receives over and above the project assets is a right to rescind the project loan agreement with the borrower and/or to claim damages for breach of any undertakings, representations or warranties given by the borrower in the project loan agreement. Of course, where the borrower is a special purpose vehicle with no assets other than the project assets being financed by the lenders, then a right to claim damages from the borrower is likely to add little to a claim by the lenders for recovery of the project loan from the borrower. Further, the right to rescind the project loan agreement is likely merely to duplicate the acceleration rights of the lenders following the occurrence of an event of default contained in the project loan agreement. However, in those cases where the borrower does have other assets, or the sponsors are prepared to underwrite any claims by the project lenders for damages against the borrower, then a claim for damages for breach of any undertakings, representations or warranties may afford the lenders some additional recourse.

A claim for damages, however, from a lender’s perspective is not the same under English law (and for that matter most common law based jurisdictions) as a claim for recovery of a debt under, say, a financial guarantee. This is because a claim for damages is subject to certain common law rules; for example:

- The lender must show that the loss was caused by the breach in question
- This loss must have been reasonably foreseeable at the time the undertaking or warranty was given
- The lender is in any event under a duty to mitigate its loss.

In other words, a claim for damages against the borrower is an unliquidated claim as opposed to a claim for a debt, which would be a liquidated claim. All that a lender has to show in the case of a liquidated claim is that the debt was incurred or assumed by the borrower and that it has become due. This is clearly considerably easier than having to satisfy the common law rules and, consequently, lenders and their advisers, wherever possible, will seek to structure arrangements with a view to acquiring liquidated claims against borrowers and others supporting the borrower's obligations (this is particularly important for lenders in the context of sponsor completion undertakings – see section 6.5).

One of the key differences, therefore, between project financing and corporate financing lies in the recourse that the lender has to the assets of the borrower. As the earlier definitions demonstrate, in project financing this recourse is limited to an identifiable pool of assets, whereas in corporate financing the lender will have recourse to all the assets of the borrower (to the extent that these assets have not been charged to other lenders). Indeed, should the borrower fail to pay a debt when due, then, subject to the terms of the loan documentation, the lender would be entitled to petition to wind up the borrower and prove in the liquidation of the borrower on a *pari passu* basis with all the other unsecured creditors of the borrower. In the context of a project financing, however, a lender would only be entitled to this ultimate sanction if the project vehicle is a special purpose vehicle set up specially for the project being financed. In those cases where the project vehicle undertook other activities, then it would look to ring fence the assets associated with these activities and in these cases the lender would not ordinarily be entitled to petition to wind up the borrower for non-payment of the project debt. To allow otherwise would be to allow the lender to have recourse to non-project assets, which would defeat the purpose of structuring the loan on limited or non-recourse terms in the first place.

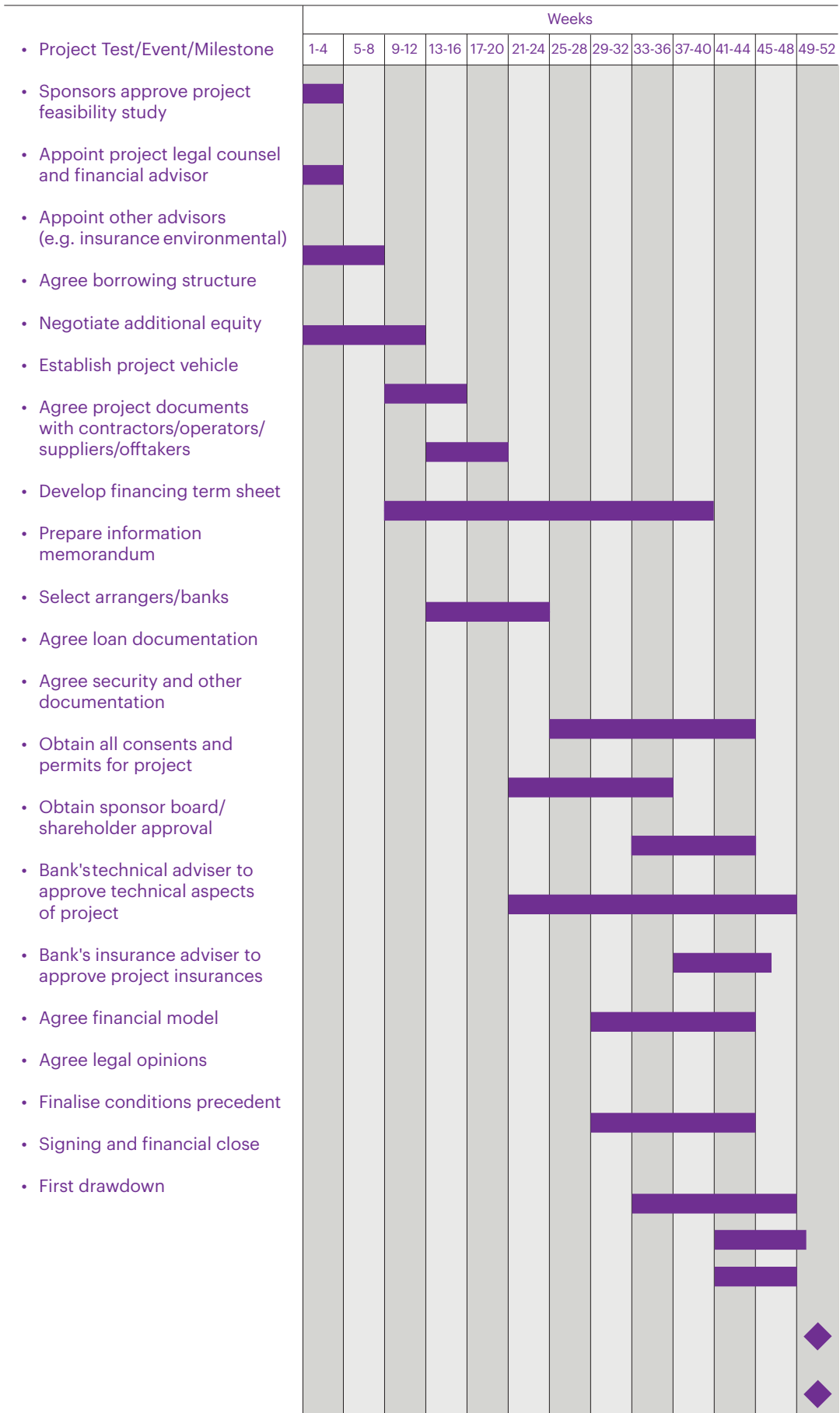
This principle of limited recourse financing was recognised by the English courts as long ago as 1877 (and possibly earlier) in the well-known case of *Williams v. Hathaway* (1877) 6 CH D 544. In this case, a sum of money (the fund) was paid by way of recompense by a railway company to the vicar of a parish and the incumbent of an ecclesiastical district in accordance with an Act of Parliament which authorised the railway company to take a certain church for its purposes. The Act directed, in effect, that the money be applied by the recipients to provide a new church and parsonage. The recipients of the fund contracted with a builder to build the church and parsonage and the project proceeded. In the event, the cost of the works exceeded the monies in the fund and the builder took legal action to recover the deficiency. Jessel MR, held, *inter alia*, that it was permissible for a proviso to a covenant to pay to limit the personal liability under the covenant to pay without destroying it. Despite the fact that the contractual arrangements were with the individuals who were for the time being trustees of the fund, it was held that “the object [of the contractual instrument] is to bind the fund” and not the trustees in their personal capacity.

## 1.4 Why Choose Project Finance?

Before examining how projects are structured and financed, it is worth asking why sponsors choose project finance to fund their projects. Project finance is invariably more expensive than raising corporate funding. Also, and importantly, it takes considerably more time to organise and involves a considerable dedication of management time and expertise in implementing, monitoring and administering the loan during the life of the project. There must, therefore, be compelling reasons for sponsors to choose this route for financing a particular project.

The following are some of the more obvious reasons why project finance might be chosen:

- The sponsors may want to insulate themselves from both the project debt and the risk of any failure of the project
- A desire on the part of sponsors not to have to consolidate the project's debt on to their own balance sheets. This will, of course, depend on the particular accounting and/or legal requirements applicable to each sponsor. However, with the trend these days in many countries for a company's balance sheet to reflect substance over form, this is likely to become less of a reason for sponsors to select project finance (the implementation in the UK of the recent accounting standard on “Reporting the Substance of Transactions” (FRS 5) is an example of this trend)
- There may be a genuine desire on the part of the sponsors to share some of the risk in a large project with others. It may be that in the case of some smaller companies their balance sheets are simply not strong enough to raise the necessary finance to invest in a project on their own and the only way in which they can raise the necessary finance is on a project financing basis
- A sponsor may be constrained in its ability to borrow the necessary funds for the project, either through financial covenants in its corporate loan documentation or borrowing restrictions in its statutes
- Where a sponsor is investing in a project with others on a joint venture basis, it can be extremely difficult to agree a risk-sharing basis for investment acceptable to all the co-sponsors. In such a case, investing through a special purpose vehicle on a limited recourse basis can have significant attractions



- There may be tax advantages (e.g. in the form of tax holidays or other tax concessions) in a particular jurisdiction that make financing a project in a particular way very attractive to the sponsors
- Legislation in particular jurisdictions may indirectly force the sponsors to follow the project finance route (e.g. where a locally incorporated vehicle must be set up to own the project's assets).

This is not an exhaustive list, but it is likely that one or more of these reasons will feature in the minds of sponsors which have elected to finance a project on limited recourse terms.

Project finance, therefore, has many attractions for sponsors. It also has attractions for the host government. These might include the following:

- Attraction of foreign investment
- Acquisition of foreign skills and know-how
- Reduction of public sector borrowing requirement by relying on foreign or private funding of projects
- Possibility of developing what might otherwise be non-priority projects
- Education and training for local workforce.

## 1.5 Structuring the Project Vehicle

One of the first, and most important, issues that the project sponsors will face in deciding how to finance a particular project will be how to invest in, and fund, the project. There are a number of different structures available to sponsors for this purpose. The most common structures used are:

- A joint venture or other similar unincorporated association
- A partnership
- A limited partnership
- An incorporated body, such as a limited company (probably the most common).

Of these structures the joint venture and limited company structure are the most universally used.

A joint venture is a purely contractual arrangement pursuant to which a number of entities pursue a joint business activity. Each party will bring to the project not only its particular expertise but will be responsible for funding its own share of project costs, whether from its own revenues or an outside source. Practical difficulties may arise as there is no single project entity to acquire or own assets or employ personnel, but this is usually overcome by appointing one of the parties as operator or manager, with a greater degree of overall responsibility for the management and operation of the project. This is the most common structure used in the financing of oil and gas projects in the UK continental shelf.

Partnerships are, like joint ventures, relatively simple to create and operate but, in many jurisdictions, partnership legislation imposes additional duties on the partners, some of which (such as the duty to act in the utmost good faith) cannot be excluded by agreement. Liability is unlimited other than for the limited partners in a limited partnership, but these are essentially "sleeping" partners who provide project capital and are excluded from involvement in the project on behalf of the firm.

In many cases it will not be convenient (or may not be possible) for the project assets to be held directly (whether by an operator or the individual sponsors) and in these cases it may be appropriate to establish a company or other vehicle which will hold the project assets and become the borrowing vehicle for the project. The sponsors will hold the shares in this company or other vehicle in agreed proportions. In most cases where this route is followed, the company or other vehicle would be a special purpose vehicle established exclusively for the purposes of the project and the use of the special purpose vehicle for any purposes unconnected with the project in question will be prohibited. In addition to the constitutional documents establishing the vehicle, the terms on which it is to be owned and operated will be set out in a sponsors' or shareholders' agreement.

Whether sponsors follow the joint venture (direct investment) route or the special purpose vehicle (indirect investment) route ultimately will depend on a number of legal, tax, accounting and regulatory issues, both in the home country of each of the sponsors and in the host country of the project (and, perhaps, other relevant jurisdictions). Some of the relevant influencing factors might include the following:

- A wish on the part of the project sponsors to isolate the project (and, therefore, distance themselves from it) in a special purpose vehicle. If the project should subsequently fail, the lenders will have no recourse to the sponsors, other than in respect of any completion or other guarantees given by the sponsors (see section 6.5 for an explanation of such guarantees). The sponsors are effectively limiting their exposure to the project to the value of the equity and/or subordinated debt that they have contributed to the project
- The use of a joint venture or partnership, as opposed to a special purpose vehicle, can often mean that the sponsors must assume joint and several liability when contracting with third parties on behalf of the joint venture or partnership. If the borrowing for the project is through the joint venture or partnership, this is likely to result in each sponsor having to show the full amount of the project debt on its balance sheet, not a particularly attractive proposition for most project sponsors.
- By contrast, the use of a special purpose vehicle may mean that the sponsors do not have to consolidate the project debt into their own balance sheets (if it is not a “subsidiary” or “subsidiary undertaking” or equivalent). This may also be important for cross-default purposes for the sponsor. A sponsor would not want a default by a project company (even if it is a subsidiary) to trigger a cross-default in respect of other contracts or projects at sponsor level. The corporate lenders to the sponsor may agree to this, provided there is no recourse by the project’s lenders to the sponsor in the event of a project company default, eliminating the risk that the project company default will damage or further damage the sponsor’s balance sheet (note the wide definition of “project finance borrowing” used earlier in this section that typically might be used in such a case)
- On a similar note, negative pledge covenants in a sponsor’s corporate loan documentation may prohibit or limit the sponsor from creating the necessary security required in connection with a project financing. As with the cross-default clause, the corporate lenders to the sponsor may agree to exclude security interests created by the sponsor (or a subsidiary or subsidiary undertaking of the sponsor) in connection with a specific project from the terms of the sponsor’s negative pledge
- It may be a host government requirement that any foreign investment is channelled through a local company, particularly where the granting of a concession might be involved. This may be for regulatory or tax reasons or, in the case of a strategically important industry, for security or policy reasons
- The use of a joint venture or partnership can have significant tax advantages in some jurisdictions (e.g. each participant may be taxed individually and may have the ability to take all tax losses on to its own balance sheet) which may make such a vehicle attractive for some sponsors. On the other hand, a limited liability company’s profits are in effect taxed twice, once in the hands of the company and again in the hands of the individual shareholders
- A special purpose vehicle will be attractive where different sponsors require to fund their investment in the project in different ways (e.g. one may want to borrow whilst others may wish to fund the investment from internal company sources) or one may want to subscribe equity whereas another might wish to contribute debt as well (e.g. subordinate the repayment of this debt to the right of project lenders) and
- Practical considerations may also be relevant. Partnerships and contractual joint ventures are less complicated (and cheaper) to establish and operate. Registration requirements in respect of limited companies and limited partnerships eliminate confidentiality. It should also be remembered that it is easier for a company to grant security, in particular floating charges, and this may be an important consideration for the raising of finance.

In the event, the choice will never be a straightforward one and it is often the case that sponsors will have conflicting requirements. This will be one of the many challenges for those involved in project financing. It is, however, important to establish the appropriate vehicle at the outset as it can be difficult to change the vehicle once the project proceeds and, especially, once the funding structure is in place.

## 1.6 Key Sponsor Issues

Having settled on the structure of the project vehicle, it will then be necessary for the sponsors to agree at an early stage on a number of other key matters. These will include:

- The respective roles in the project of each sponsor (e.g. who will deal with the technical aspects of the project, negotiate the concession, negotiate with the lenders, arrange the project insurances, negotiate with suppliers/offtakers, oversee the establishment of the project vehicle, arrange for the necessary consents and permits). Frequently the allocation of such tasks will have been dictated already in the make-up of the sponsor group, but it is important for each sponsor to have a clear understanding at an early stage of what tasks it is to perform
- The appointment of advisers to the project. The two key appointments will be the appointment of financial and legal advisers to the project. However, other advisers, such as technical, insurance, environmental and market risk advisers, may also be required, depending on the circumstances of a particular project
- The capitalisation of the project or project company. How much capital will be put in, when will this be injected and by what method? There is no hard-and-fast rule for determining how much sponsor capital must be injected into a project. Some projects have been structured on the basis that the sponsors have put up only a nominal amount of capital (called “pinpoint capital”). More typically, however, one might expect to see an overall debt/equity ratio in the 90/10 to 75/25, range depending on the dynamics of a particular project. Most lenders will require that sponsor capital is injected at the outset, and before the banks start funding the project company. They may, however, relax this position if they are satisfied as to the credit standing of the sponsors or have received security (such as a bank guarantee or letter of credit) to secure the sponsor’s capital commitment. Shareholder funds are usually injected by way of a subscription for shares of the project company, although there is usually no objection to shareholder loans so long as these are subordinated to the lenders’ loans and are non-interest bearing (or at least the requirement to pay interest is suspended until dividends are permitted to be paid (see below))
- The dividend/distribution policy of the sponsors. This will frequently be a source of much debate with the project lenders. On the one hand, most sponsors will be keen to extract profits at an early stage. The project lenders, however, will not be keen to see the sponsors taking out profits until the project has established and proved itself and the project lenders have been repaid at least some of their loans. It would be unusual for the project lenders to permit the payment of dividends (or the payment of interest on subordinated loans) prior to the date of the first repayment of the project loan and then only if the key project cover ratios will be satisfied after the payment of the dividends (see section 8.5 for an explanation of key cover ratios)
- Management of the project vehicle. Who will undertake this and how? Will the project vehicle have its own employees and management or will these be supplied by one or more of the sponsors? If one or more of the sponsors is to supply management and/or technical assistance to the project company, then the lenders will expect to see this arrangement formalised in an agreement between the sponsor in question and the project company
- Sale of shares and pre-emption rights. This will be of concern to sponsors and lenders alike. In particular, the lenders will want the comfort of knowing that the sponsor group that has persuaded them to lend to the project company in the first place will continue to be in place until the loans have been repaid in full.

## 1.7 Project Implementation and Management

The implementation of a project financing is a complicated, time-consuming and difficult operation. For most projects it is a case of years rather than months from inception of the project to reach financial close. It is not unheard of for some complex (and, perhaps, politically sensitive) projects to have a gestation period in excess of five years. The chart in Fig. 3 is an illustration of the more important milestones for a typical project and how long one might expect the process to take. However, each project will have a unique timetable, driven largely by the particular dynamics and circumstances of the project.

With so many parties involved having conflicting interests, the issue of effective project management assumes great significance in most project financings. It does not matter whether the overall responsibility is assumed by the sponsors (and their advisers) or by the lenders (and their advisers). What is crucial, however, is that one of the influential parties assumes overall control for managing the project from its inception to financial close. Without effective project management, a project can very easily go off the rails, with each of the parties singularly concentrating on issues and documents that are relevant to it. Because of the need to understand all aspects of the project with a view to assessing the overall risk profile, it is often the lenders (and their advisers) who are in the best position to manage effectively and steer a project to financial close.

# Section 2

## Parties to a Project Financing

### 2.1 Parties and Their Roles

One of the complicating (and interesting) features of most projects is the considerable number of parties with differing interests that are brought together with the common aim of being involved to a greater or lesser extent with a successful project. It is one of the challenges of those involved with a project to ensure that all of these parties can work together efficiently and successfully and cooperate in achieving the project's overall targets. It is inevitably the case that, although all of the parties will share the same overall aim in ensuring that the project is successful, their individual interests will vary considerably and, in many cases, will conflict. With many projects, there will be an international aspect which will involve different project parties located in different jurisdictions and there will often be tensions between laws and practices differing from one country to another.

A common feature in many project structures is that different parties will have particular roles to play. This is especially so with many multi-sponsor projects where, for example, one sponsor may also be the turnkey contractor, whereas another sponsor may be the operator and yet another sponsor may be a supplier of key raw materials to the project or an offtaker of product from the project. Frequently it is the case (and sometimes a requirement of local laws) that one of the sponsors is a local company. Even in those countries where the involvement of a local company is not a requirement, this can have many advantages particularly where the foreign sponsors have limited experience of business practices or laws in the host country. Further, the involvement of a local company offers a degree of comfort, for the foreign sponsors and lenders alike, that the project as a whole will not be unfairly treated or discriminated against.

No two projects will have the same cast of "players" but the following is a reasonably comprehensive list of the different parties likely to be involved in a project finance transaction.

### 2.2 Project Company/Borrower

The project company will usually be a company, partnership, limited partnership, joint venture or a combination of them. As noted in section 1.5, this will be influenced to a certain extent by the legal and regulatory framework of the host government. For example, in some jurisdictions it will be a legal requirement that the holder of a licence or concession be a company incorporated in that particular country. In other there may be strict requirements in particular industries as to foreign ownership of share capital or assets, particularly in strategically important industries.

The project company will in most cases be the vehicle that is raising the project finance and, therefore, will be the borrower. It will also usually be the company that is granted the concession or licence (in a concession-based financing) and who enters into the project documents. As has been seen in section 1, the project company is frequently a special purpose vehicle set up solely for the purposes of participating in a particular project. If the project vehicle is a joint venture then it is likely that there will be multiple borrowers. This can complicate the financing arrangements unless (as is likely to be the preference of the lenders) the joint venturers agree to be jointly and severally liable for the project's debts. Where, however, the borrower is a special purpose vehicle, then the lenders would expect a newly incorporated company in the relevant jurisdiction and would seek to impose strict covenants on the ability of the borrower to undertake any non-project activities. The purpose of this is to ensure that the lenders are not exposed to any additional risks unrelated to the project itself. An example of the type and scope of such covenants is set out in Fig. 4.

## Single Purpose Vehicle Covenants

### Fig. 4

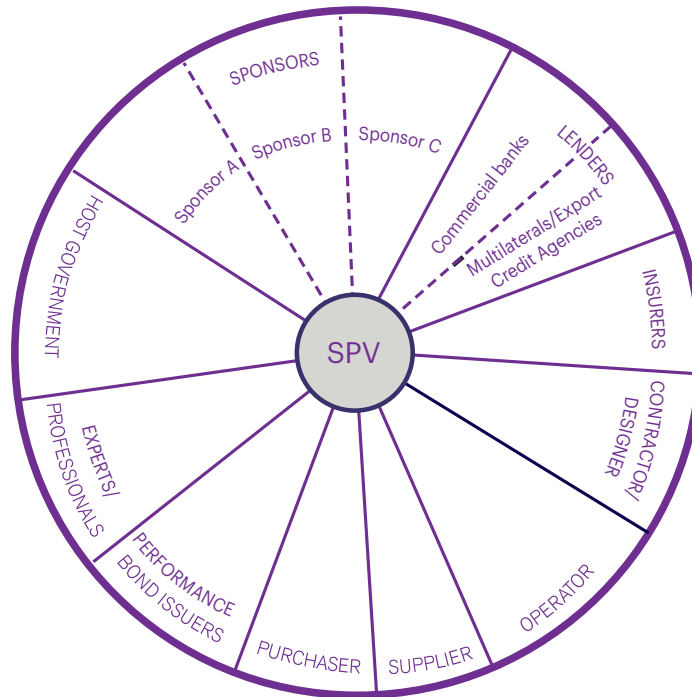
The Project Company shall not:

- engage in any business or activity, apart from the ownership, management and operation of the Project and activities ancillary thereto as permitted by this Agreement and the Security Documents or
- save as contemplated in the Security Documents, create, incur or permit to subsist any Security Interest over all or any of its present or future assets, other than any Security Interest arising by operation of law and discharged within 30 days or
- make any advances, grant any credit (save in the routine course of its day-to-day business) or give any guarantee or indemnity to, or for the benefit of, any person or otherwise voluntarily assume any liability, whether actual or contingent, in respect of any obligation of any other person, except pursuant to the Security Documents or
- issue any further shares (other than to an existing direct or indirect shareholder) or alter any rights attaching to its issued share capital in existence at the date hereof or
- save in accordance with the terms of this Agreement and the Security Documents, sell, lease, transfer or otherwise dispose of, by one or more transactions or series of transactions (whether related or not), the whole or any part of its assets or
- incur any indebtedness other than the Project Loan, unless such indebtedness is subordinated in terms of both payment and security to the satisfaction of the Project Lenders to all amounts due under this Agreement or
- save in accordance with the terms of this Agreement and the Security Documents, acquire any asset or make any investment or
- amend its constitutional documents or
- change its financial year.

### 2.3 Sponsors/Shareholders

The project sponsors are those companies, agencies or individuals who promote a project, and bring together the various parties and obtain the necessary permits and consents necessary to get the project under way. As has been noted in section 1, often they (or one of their associated companies) are involved in some particular aspect of the project. This might be the construction, operation and maintenance, purchase of the services output from the project or ownership of land related to the project. They are invariably investors in the equity of the project company and may be debt providers or guarantors of specific aspects of the project company's performance. Some of the different ways in which the sponsors/shareholders invest in a project are explained in section 1.5.

The support provided by project sponsors varies from project to project and includes the giving of comfort letters, cash injection commitments, both pre- and post-completion, as well as the provision of completion support through guarantees and the like. Support is also likely to extend to providing management and technical assistance to the project company. The different types of sponsor support for a project are covered in more detail in section 6.



## 2.4 Third-Party Equity Investors

These are investors in a project who invest alongside the sponsors. Unlike the sponsors, however, these investors are looking at the project purely in terms of a return on their investments for the benefit of their own shareholders. Apart from providing their equity, the investors generally will not participate in the project in the sense of providing services to the project or being involved in the construction or operating activities.

Third-party investors typically will be looking to invest in a project on a much longer time frame than, say, a typical contractor sponsor, who will in most cases want to sell out once the construction has been completed.

Many third-party investors are development or equity funds set up for the purposes of investing in a wide range of projects and they are starting to become a valuable source of capital for projects. Typically, they will require some involvement at board level to monitor their investment.

## 2.5 Banks

The sheer scale of many projects dictates that they cannot be financed by a single lender and, therefore, syndicates of lenders are formed in a great many of the cases for the purpose of financing projects. In a project with an international dimension, the group of lenders may come from a wide variety of countries, perhaps following their customers who are involved in some way in the project. It will almost certainly be the case that there will be banks from the host country participating in the financing. This is as much for the benefit of the foreign lenders as from a desire to be involved on the part of the local lenders. As with the involvement of local sponsors, the foreign lenders will usually take some comfort from the involvement of local lenders.

As is usually the case in large syndicated loans, the project loan will be arranged by a smaller group of arranging banks (which may also underwrite all or a portion of the loan). Often the arranging banks are the original signatories to the loan agreement with the syndication of the loan taking place at a later date. In such cases the arranging banks implicitly take the risk that they will be able to sell down the loan at a later stage.

However, participating in project financings is a very specialised area of international finance and the actual participants tend to be restricted to those banks that have the capability of assessing and measuring project risks. This is not to say that banks not having these skills do not participate in project financings, but for these banks the risks are greater as they must also rely on the judgement of the more experienced banks.

The complexity of most project financings necessitates that the arrangers are large banks with experience in this market, often having dedicated departments of specialists. For the smaller banks with an appetite for this kind of lending, however, there is usually no shortage of opportunities to participate in loans arranged by the larger banks.

## 2.6 Facility Agent

As with most syndicated loans, one of the lenders will be appointed facility agent for the purposes of administering the loan on behalf of the syndicate. This role tends to assume an even greater significance in project financings as inevitably there are more administration matters that need undertaking. Usually, however, the role of the facility agent will be limited to administrative and mechanical matters as the facility agent will not want to assume legal liabilities towards the lenders in connection with the project. The documentation will, therefore, establish that the facility agent will act in accordance with the instructions of the appropriate majority (usually 66 2/3 per cent) of the syndicate who will vote and approve the various decisions that need to be taken throughout the life of a project. The documentation, however, may reserve for the facility agent some relatively minor discretions in order to avoid delays for routine consents and approvals.

## 2.7 Technical Bank

In many project financings a distinction is drawn between the facility agent (who deals with the more routine day-to-day tasks under the loan agreement) and a bank appointed as technical bank, which will deal with the more technical aspects of the project loan. In such cases it would be the technical bank that would be responsible for preparing (or perhaps reviewing) the banking cases and calculating the cover ratios (see section 8.5 for a more detailed explanation of cover ratios). The technical bank would also be responsible for monitoring the progress of the project generally on behalf of the lenders and liaising with the external independent engineers or technical advisers representing the lenders. It will almost always be the case that the technical bank will be selected for its special ability to understand and evaluate the technical aspects of the project on behalf of the syndicate.

As with the facility agent, the technical bank will be concerned to ensure that it is adequately protected in the documentation and will be seeking to minimise any individual responsibility to the syndicate for its role as technical bank.

## 2.8 Insurance Bank/Account Bank

In some of the larger project financings additional roles are often created for individual lenders, sometimes for no other reason than to give each of the arranging banks a meaningful individual role in the project financing. Two of these additional roles are as insurance bank and as account bank.

The insurance bank, as the title suggests, will be the lender that will undertake the negotiations in connection with the project insurances on behalf of the lenders. It will liaise with an insurance adviser representing the lenders and its job will be to ensure that the project insurances are completed and documented in a satisfactory manner and that the lenders' interests are observed.

The account bank will be the lender through which all the project cash flows flow. There will usually be a disbursement account to monitor disbursements to the borrower and a proceeds account into which all project receipts will be paid. Frequently, however, there will be a number of other project accounts to deal with specific categories of project receipts (e.g. insurances, liquidated damages, shareholder payments, maintenance reserves, debt service reserves). A more detailed description of the project accounts and their operation is set out in section 8.2.

## 2.9 Multilateral and Export Credit Agencies

Many projects are co-financed by the World Bank or its private sector lending arm, the International Finance Corporation (IFC), or by regional development agencies, for instance the European Bank for Reconstruction and Development (EBRD), the African Development Bank or the Asian Development Bank.

These multilateral agencies are able to enhance the bankability of a project by providing international commercial banks with a degree of protection against a variety of political risks. Such risks include the failure of host governments to make agreed payments or to provide foreign exchange and failure of the host government to grant necessary regulatory approvals or to ensure the performance of certain participants in a project.

Export credit agencies also play a very important role in the financing of infrastructure and other projects in emerging markets. As their name suggests, the role of the agencies is to assist exporters by providing subsidised

finance either to the exporter direct or to importers (through buyer credits). Details of the various multilateral agencies and ECAs and a description of the type of financing support they each provide in relation to projects are set out in section 9.

## 2.10 Construction Company

In an infrastructure project the contractor will, during the construction period at least, be one of the key project parties. Commonly, it will be employed directly by the project company to design, procure, construct and commission the project facility assuming full responsibility for the on-time completion of the project facilities usually referred to as the “turnkey” model.

The risks associated with the construction phase are discussed in more detail in section 3.4. The contractor will usually be a company well known in its field and with a track record for constructing similar facilities, ideally in the same part of the world. In some large infrastructure projects a consortium of contractors is used. In other cases an international contractor will join forces with a local contractor. In each of these cases one of the issues that will be of concern to both the project company and the lenders is whether the contractors in the joint venture will assume joint and several liability or only several liability under the construction contract. This may be dictated by the legal structure of the joint venture itself (e.g. whether it is an unincorporated association or a true partnership, see section 1.5 for a discussion of the key differences). Lenders, for obvious reasons, will usually prefer joint and several liability.

Although most projects are structured on the basis that there will be one turnkey contractor, some projects are structured on the basis that a number of companies are employed by the project company to carry out various aspects of the design, construction and procurement process which are carried out under the overall project management of either the project company or a project manager. This is not a structure favoured by lenders as it can lead to gaps in responsibilities for design and construction. Lenders will also usually prefer that the project company divests itself of responsibility for project management and that this is assumed by a creditworthy entity against whom recourse may be had if necessary. This is discussed further in section 5.3.

## 2.11 Operator

In most infrastructure projects, where the project vehicle itself is not operating (or maintaining) the project facility, a separate company will be appointed as operator once the project facility has achieved completion. This company will be responsible for ensuring that the day-to-day operation and maintenance of the project is undertaken in accordance with pre-agreed parameters and guidelines. It will usually be a company with experience in facilities management (depending upon the particular project) and may be a company based in the host country. Sometimes one of the sponsors will be the operator as this will often be the principal reason why that sponsor was prepared to invest in the project.

As with the contractor, the lenders will be concerned as to the selection of the operator. They will want to ensure that the operator not only has a strong balance sheet but also has a track record of operating similar types of projects successfully.

The contractor and operator are not usually the same company as very different skills are involved. However, both play a key role in ensuring the success of a project.

## 2.12 Experts

These are the expert consultancies and professional firms appointed by the lenders to advise them on certain technical aspects of the project. (The sponsors will frequently also have their own consultants/professionals to advise them.) The areas where lenders typically seek external specialist advice are on the technical/engineering aspects of projects as well as insurances and environmental matters. Lenders will also frequently turn to advisers to assist them in assessing market/demand risk in connection with the project.

Each of these consultancies/professional firms will be chosen for its expertise in the particular area and will be retained to provide an initial assessment prior to financial close and, thereafter, on a periodic basis. An important point to note is that these consultancies/professional firms are appointed by (and therefore answerable to) the lenders and not the borrower or the sponsors. However, the cost of these consultants/professional firms will be a cost for the project company to assume and this can be a cause of friction. It is usual, therefore, for a fairly detailed work scope to be agreed in advance between the lenders, the expert and the sponsors.

## 2.13 Host Government

As the name suggests this is the government in whose country the project is being undertaken. The role of the host government in any particular project will vary from project to project and in some developing countries the host government may be required to enter into a government support agreement (see section 6.7). At a minimum, the host government is likely to be involved in the issuance of consents and permits both at the outset of the project and on a periodic basis throughout the duration of the project. In other cases, the host government (or an agency of the host government) may actually be the purchaser or offtaker of products produced by the project and in some cases a shareholder in the project company (although not usually directly but through government agencies or government controlled companies). It is usually the case that the host government will be expected to play a greater role in project financing (whether in providing support, services or otherwise) in the lesser developed and emerging countries.

Whatever the actual level of involvement the host government of a particular country plays in project financings, its general attitude and approach towards foreign financed projects will be crucial in attracting foreign investment. If there has been any history of less than even-handed treatment of foreign investors or generally of changing the rules, this may act as a serious block on the ability to finance projects in that country on limited recourse terms.

## 2.14 Suppliers

These are the companies that are supplying essential goods and/or services in connection with a particular project. In a power project, for example, the fuel supplier for the project will be one of the key parties. In other projects, a particular supplier may be supplying equipment and/or services required during either the construction or the operating phase of the project. Both the contractor and the operator would also fall under this category. Many of the comments made with respect to the contractor and the operator will also apply to the suppliers. However, it is not always the case that the suppliers (and for that matter the purchasers) are as closely tied into a project structure as, say, the contractor and operator. The lenders may not therefore be in a position to dictate security terms to them to the same extent.

Where there is no long-term supplier of essential goods and/or services to a project, both the lenders and the project company are necessarily taking the risk that those supplies will be available to the project in sufficient amounts and quality, and at reasonable prices.

## 2.15 Purchasers

In many projects where the project's output is not being sold to the general public, the project company will contract in advance with an identified purchaser to purchase the project's output on a long-term basis. For example, in a gas project there may be a long-term gas offtake contract with a gas purchaser. Likewise in a power project the purchaser/offtaker may be the national energy authority that has agreed to purchase the power from the plant. However, it is not always the case that there is an agreed offtaker. In some projects (such as oil projects) there will be no pre-agreed long-term offtake contract; rather the products will be sold on the open market and to this extent the banks will take the market risk.

In some projects essential supplies to the project (such as fuel) and the project's output (e.g. electricity) are purchased by the project company or, as the case may be, sold on "take-or-pay" terms. In other words the purchaser is required to pay for what it has agreed to purchase whether or not it actually takes delivery. This type of contract is discussed in more detail in section 3.4.

## 2.16 Insurers

Insurers play a crucial role in most projects. If there is a major catastrophe or casualty affecting the project then both the sponsors and the lenders will be looking to the insurers to cover them against loss. In a great many cases, if there was no insurance cover on a total loss of a facility then the sponsors and lenders would lose everything. Lenders in particular, therefore, pay close attention not only to the cover provided but also to who is providing that cover. Most lenders will want to see cover provided by large international insurance companies and will be reluctant to accept local insurance companies from emerging market countries.

In some industries (e.g. the oil industry) some of the very large companies have set up their own offshore captive insurance companies, either for their own account or on a syndicate basis with other large companies. This is, in effect, a form of self-insurance and lenders will want to scrutinise such arrangements carefully to ensure that they are not exposed to any hidden risks.

In other cases, insurance cover for particular risks either may not be available or may be available only at prohibitive premiums or from insurers of insufficient substance or repute. In such cases the lenders will want to see that alternative arrangements are made to protect their interests in the event of a major catastrophe or casualty.

These and other insurance issues are examined in more detail in section 7.

## 2.17 Other Parties

There will be other parties such as financial advisers, rating agencies, local/regional authorities, accountants, lawyers and other professionals that have a role to play in many projects to add to the complexity. Add to this the fact that very often each of these parties will have its own separate legal and tax advisers and it can be seen that the task of legal coordination of these projects can (and frequently is) a difficult, time-consuming and expensive process. This makes effective project management an essential and key part of the success of the implementation of a project (see section 1.7).

## 2.18 Summary of Key Lenders' Concerns

Before agreeing to lend to a particular project, the lenders will pay specific attention to each of the parties that will have an involvement (however small) in the project, whether at inception, during the construction phase or during the operating phase. It is not an exaggeration to say that, in the case of many project financings, the robustness of the overall project structure is only as strong as its weakest link. The following are some of the key issues that the lenders will focus on:

- The creditworthiness of the parties and, in particular, whether they have sufficient financial resources to meet their obligations under the relevant project documents. If the lenders are not so satisfied, then they are likely to call for guarantees or letters of credit from parent companies or other banks and financial institutions to support these obligations
- Equally important is the ability of the parties to deliver and perform according to the specifications of the project documents. Do the parties have sufficient technical and management resources? Have they experience of similar projects in similar circumstances? Have they undertaken similar arrangements in the relevant country? These are all issues that the lenders will ask themselves before committing to a particular project
- What, if any, relationship does a particular project party have to the project company? As has been noted in this section, it is frequently the case that one of the sponsors will be the contractor, the operator or a major supplier to, or purchaser of output from, the project. In most cases this is likely to be viewed by the lenders favourably; but in some cases the lenders may be concerned to ensure that a proper arm's-length relationship prevails
- Independence of the project parties, i.e. are they likely to be influenced in any way by local political considerations in such a way as might be detrimental to the lenders? Clearly, foreign parties are less likely to be susceptible to local political or other pressures than local companies and this can sometimes be a concern for lenders
- Continuity, i.e. will a particular project party continue to be involved in the particular project for the duration of the lenders' involvement? Lenders will usually seek to impose restrictions on the transfer of obligations under project documents by key project parties and where this is not possible then the occurrence of such a transfer might constitute an event of default
- In the case of parties providing technical advice (such as engineers, insurance advisers and lawyers) to the lenders, do they have sufficient professional indemnity insurance cover in place to cover negligent advice? Negligent advice could turn out to be disastrous for the lenders and it would be unfortunate if in those circumstances they had no recourse to the source of such negligent advice
- The lenders will be concerned to ensure that each party that contracts with the project company is duly authorised to enter into contracts with the project company and that its obligations under these contracts constitute its legal, valid, binding and enforceable obligations. To ensure this, the lenders will require legal opinions from lawyers in the home jurisdiction of each such project party. Special attention will often be paid to ensuring the validity and enforceability of the obligations of governments and state authorities or institutions as all too frequently it seems questions arise over their role or participation in projects that are being privately financed

It will be apparent that in many of these instances the concerns of the lenders and the project company/sponsors will be the same, each wants to minimise the risk of external influences or events acting to the detriment of the project.

# Section 3

## Project Financing Documentation

### 3.1 Role of Documentation

The essence of project financing is the apportionment of project and other risks amongst the various parties having an interest in that project. The way in which this risk allocation is implemented is, essentially, through the complex matrix of contractual relations between the various project parties as enshrined in the documentation entered into between them. There is no general body of law in England (or elsewhere) that dictates how projects must be structured or how the risks should be shared amongst the project parties. Rather, each project must fit within the legal and regulatory framework in the various jurisdictions in which it is being undertaken or implemented. Accordingly, the contracts between the various project parties assume a huge significance and it is these documents that are the instruments by which many of the project risks are shared amongst the project parties.

As will be apparent, there is no such thing as a standard set of project documents. Each project will have its own set of documents specially crafted for that particular project. Set out below is a brief description of some of the key documents found in many project financing structures.

These documents can conveniently be grouped as follows:

- Shareholder/sponsor arrangements
- Loan and security documents
- Project documents.

### 3.2 Shareholder/Sponsor Documentation

#### Pre-Development Agreements

These are agreements entered into by two or more companies that have agreed to undertake a feasibility study in relation to a proposed project. As the arrangements between the parties will not usually be sufficiently well developed to warrant a formal shareholders' agreement, this document can conveniently deal with such matters as initial decision-making and allocation of tasks in relation to investigating a particular project or proposal. Typically, the agreement would be for a limited duration and would be quite specific about the scope of the proposed arrangements and the terms upon which a party could withdraw from the arrangements. It would also deal with appointment of advisers and general cost sharing. One might also expect to see provisions relating to confidentiality and restrictions on competing.

Similar agreements may also be entered into where parties join together to bid for a particular contract or concession and do not want to incur the cost or expense of a formal joint venture agreement or shareholders' agreement unless they are successful in their bid.

#### Shareholders' Agreement/Joint Venture Agreement

In those projects where the project is being undertaken using a special purpose vehicle owned by two or more shareholders, those shareholders will usually regulate the relationship between them by entering into a shareholders' agreement. On the other hand, where a joint venture structure is used, a joint venture agreement will usually be entered into. A shareholders' agreement in relation to a project will not differ greatly from a shareholders' agreement relating to the ownership of any other company and will need to deal with items such as:

- Injection of share capital; how much, when and in what form
- Funding of the project company
- Voting requirements for particular matters
- Resolution of disputes
- Dividends policy
- Management of special purpose vehicle
- Disposal of shares and pre-emption rights.

A joint venture agreement will contain many of the same provisions although will not need to deal with those matters concerning the setting up and management of a special purpose vehicle. It will, however, have to deal with management of the project and voting in connection with the project generally.

From the point of view of the project lenders, they are likely to be concerned with a number of issues with regard to the sponsors/shareholders. Perhaps the key issues for them will be:

- The identity of the sponsors/shareholders and their experience and creditworthiness. Where shareholders/sponsors nominate a subsidiary to undertake any responsibilities or obligations with regard to a particular project, then the project lenders may well demand guarantees from the parent companies to support their subsidiaries until the project debt is repaid
- If the shareholders/sponsors are committing management resources and/or expertise for the special purpose vehicle and/or the project, then the lenders will want to see these obligations spelt out in very clear terms and to know which shareholder/sponsor will be providing which services and on what terms. Quite often, these arrangements are set out in a separate management/supervision agreement
- If the shareholders/sponsors agree to put up further equity at a later date, then the terms and conditions upon which this equity is put up will need to be spelt out very clearly (in many, if not most, cases the lenders are likely to require that the shareholders put up their funds first or at least proportionate to loan drawdowns). From the perspective of the lenders, rather than take an assignment by way of security of such a commitment owed by the sponsors/shareholders to the project company, the lenders are likely to require direct equity undertakings from the sponsors/shareholders for a number of reasons. Amongst these is the fact that an assignee cannot claim for a loss in excess of that of the assignor and it might very well be the case that the lenders' actual loss is considerably greater than that of the project company should the sponsors/shareholders default. It may also be the case that set-offs/counterclaims could exist between the project company and the sponsors/shareholders, which would have the effect of reducing the sponsors'/shareholders' obligations. A further weakness is that an obligation to subscribe for equity in the project company will not survive the project company's liquidation thus depriving the lenders of this source of funds when they might most need it. Further, any claims by the lenders for breach of such equity commitments would be a damages-based claim which suffers from the weaknesses, from a lender's perspective, that the normal common law rules as to causation, remoteness and mitigation of damages will apply (see section 1.3 for a more detailed explanation of this issue). For the lenders it would be better for an equity commitment to be constructed as a financial guarantee or indemnity albeit limited to the amount of the equity commitment although this may well be resisted by the sponsors/shareholders.

If, as is often the case, the project company is a party to the shareholders' agreement and is the beneficiary of any rights and/or benefits under this agreement, then the project lenders are likely to want an assignment by way of security of the benefit of this agreement as part of their overall security package.

## Sponsors Shareholders Support Agreement

In some project financings, the sponsors/shareholders will enter into a support agreement with the project company and the lenders. This agreement is likely to contain a number of commitments that the lenders require of the sponsors/shareholders with respect to the project and the project company (some of which might otherwise be found in a sponsors'/shareholders' agreement), including:

- A requirement to provide management and technical assistance (including, where necessary, secondment of key employees)
- A requirement to provide funding, whether through subscription for equity or by the provision of loans (it is likely that the lenders will require any loans to be unsecured and subordinated to the project loans)
- Restrictions on the ability of the sponsors/shareholders to dispose of their shares in the project company
- Any completion guarantees or cost overrun guarantees to be given by the sponsors/shareholders (or any of them)
- Any security requirements from the sponsors/shareholders supporting their commitments to provide equity at a later stage

### 3.3 Loan and Security Documentation

#### Project Loan Agreement

In most projects this will be a syndicated loan agreement entered into between the borrower, the project lenders and the facility agent. It will regulate the terms and conditions upon which the project loans may be drawn down and what items of project expenditure the loans may be used for. The agreement will contain the usual provisions relating to representations, covenants and events of default found in other syndicated loan agreements but expanded to cover the project, project documents and related matters. The provisions relating to the calculation and payment of interest will be similar for standard Euro-currency, loans except that in most projects interest will be capitalised during the construction period or until project revenues come on stream.

Project Financing Documentation

Fig. 6



Repayment terms will vary from project to project and will often be tied to the receipt of project cash flows and/or the dedication of a minimum percentage of the project's cash flow towards debt service. The agreement will normally provide for all project cash flows to flow through one of a number of project accounts maintained by the agent (or a security trustee or account bank) and charged to the project lenders. There will be detailed mechanics relating to the calculation of project cover ratios and the preparation of banking cases and forecasting information with respect to the project (see section 8.5 for a more detailed discussion of cover ratios). There will also be provision for the appointment of consultants, advisers and technical experts by the project lenders. The balance of the agreement will contain boilerplate provisions customarily found in Euro-currency loan documentation adapted, as appropriate, for a project financing.

#### Security Documents

The form of these will vary from jurisdiction to jurisdiction and will depend on the nature and type of assets that are the subject of the security. A more detailed description of the type of assets and security found in project financings is set out in section 6. In common law based jurisdictions the taking of security in relation to project financing is usually through a fixed and floating charge covering all of the property and assets of the project company. In civil law based and other legal systems, however, the position is usually more complex, with different documents being required for different categories of assets.

In those jurisdictions that recognise trusts, it is usually convenient to appoint a trustee (often one of the banks) to hold the security on trust for the lenders as this not only insulates the security from the insolvency of the institution holding the security but also facilitates the trading of rights and obligations by the banks without the risk of disturbing the security.

Where a security trustee is appointed by the project lenders, this is usually under a separate security trust deed which sets out the terms of appointment, rights, duties and obligations of the security trustee, as well as provides for the usual indemnity and exculpatory provisions for the benefit of the trustee. Also, the security trust deed may deal with the order of application of payments amongst the various groups of lenders, although this is frequently dealt with in a separate intercreditor agreement. The applicable governing law for a security document will depend to a great extent on the location of the asset over which security is being taken. The basic rules for determining the correct governing law for security assets is set out in section 6.9.

### 3.4 Project Documents

#### Concession Agreements/Licences

In many projects, particularly Build-Operate-Transfer (“BOT”) projects, the concession agreement will be the key project document as it is the document that will vest in the project company the right to explore, exploit, develop or operate, as appropriate, the concession or other relevant rights to the project. At the other end of the spectrum, all that may be needed for a project company to be vested with the necessary legal rights to exploit is a licence. Thus, for example, in an oil and gas financing in the UK continental shelf, the project vehicle will be a beneficiary of (or the beneficiary of a share of) a licence issued by the Department of Energy and Climate Change which entitles it to explore for and exploit hydrocarbons on the terms set out in the licence (and certain model clauses applicable to the licence). On the other hand, in a BOT project, it will invariably be the case that the project vehicle (or its sponsors) will be granted a concession by the host government (or one of its agencies) with respect to the project.

The concession agreement, often comprising a BOT obligation, but sometimes a build-own-operate obligation, is popular particularly in countries where political or budgetary constraints prevent governments from developing essential and increasingly expensive infrastructure in the public sector. A concession can offer the host government certain advantages, including:

- Minimising the impact of the project on its capital budget
- Introducing increased efficiency into the project
- Encouraging foreign investment and the introduction of new technology.

The BOT structure ends with the transfer back of the project to the relevant state authority at some future date. This may result in the state receiving a useful operational project, although sometimes the transfer is not provided to occur within the economic life of the project.

The terms which may commonly be found in concession agreements are covered in some detail in section 4, but key features are:

- The grant of a concession for a designated period of time (from the lenders’ perspective this will need to exceed the term of the project loan by a comfortable margin)
- The duties and obligations imposed on the project company with respect to the project and the concession
- Certain undertakings given by the concession grantor, e.g. as to non-competition, provision of utilities and other services provisions concerning certain changes in law
- Where appropriate, payment of concession fees
- Default and forfeiture terms
- Assignments and transfers (the project lenders will want to be certain that they can have the benefit of the concession assigned to them by way of security)
- Termination terms, including handover provisions (e.g. education and training where applicable).

In addition to some of the points noted above, the project lenders will be concerned to ensure that the concession grantor cannot unilaterally vary or terminate the terms of the concession, that the concession is transferable to any purchaser of the project (or project vehicle) and that the concession grantor should also assume at least certain risks associated with change of law and/or force majeure circumstances.

Depending on the circumstances of a particular project, the project lenders may want to enter into a direct agreement with the concession grantor to address a number of the above and other concerns (see section 6.6).

## Construction Contracts

In an infrastructure project where the project lenders are taking all or any part of the construction/completion risk, the construction contract will be one of the key project documents. There are a number of standard form construction contracts in use but it is unlikely any of them will be suitable for a project-financed contract without significant amendment. The closest to a suitable international standard contract is probably the “Orange Book” published by FIDIC.

The most common arrangement is a turnkey contract, in which a single “general” contractor assumes all risk of on-time completion of a project which meets guaranteed performance standards. In a turnkey contract, the owner specifies overall performance and reliability standards for the plant, and the turnkey contractor assumes full responsibility for design, construction, supply, installation, testing and commissioning of the plant so as to enable it to meet those specified requirements. Subject to important limitations which the contract will contain, the turnkey contractor essentially provides an overall guarantee of the performance of all components and sub-contractors.

As an alternative arrangement to a turnkey contract, sponsors may consider that they have the necessary experience to manage the design and construction of the project facility and may wish to undertake this themselves, or to leave certain responsibilities for it with the project company. Sponsors may perceive that they will be able to achieve an overall cost or time saving if they perform a role in relation to some or all of the design or construction of the facility.

If construction management responsibilities are undertaken by the project company or sponsors, lenders will need to be satisfied with their technical capacity and resources. They may wish to have additional sponsor support to ensure adequate cover against the absence of a single contractor that has overall responsibility and the likely consequences of mismanagement during design and construction.

Even less popular with lenders is a project management structure whereby a project management agreement is entered into with one project managing company which will then arrange for individual contractors to enter into contracts with the project company. In this case each of these individual contractors would carry out different parts of the project. One of the reasons lenders have a very strong preference for turnkey contracts is that they reduce the risk of claims arising between the different contractors and of unallocated responsibilities relating to the project. If a turnkey contract is not utilised, then the project lenders will need to spend considerably more time analysing the construction contracts and the risks arising from the construction arrangements.

The key provisions of a typical construction contract, and its significance for the arrangement of project finance, can be summarised as follows:

**Price and payment terms:** Contractors usually prefer to be paid by stage payments. Contracts for the provision of industrial plant commonly provide for a substantial advance payment upon or soon after contract signing and thereafter for agreed instalments of the price to be paid against achievement of specific progress “milestones”. Contractors will tend to have a preference for minimising the transfer of risk under the contract, so that its terms provide for the price to be adjusted if unforeseen circumstances or events render the assumptions on which the original price was quoted inapplicable. Not surprisingly, project lenders, on the other hand, prefer as much certainty as possible about the price. They will seek to maximise the transfer of risks to the contractor and to maximise its liability for breaches of contract, at least sufficient to preserve the project company’s projected cash flow.

Lenders are likely to look at any provision for variation of the price very carefully as this may increase the risk for the project lenders by making it uneconomic for the project lenders to complete the project should they have to take it over following a default by the project company. Lenders will, for example, seek to require that their consent be obtained before the project company exercises its rights under the construction contract to instruct variations in the works being produced, or to suspend the work.

The sponsors’ interests will not be exactly the same as those of the lenders. Sponsors will seek not only certainty of price, but also a competitive price. As regards the contractor’s liability for breaches of contract, sponsors will seek the optimum balance against price.

**Completion:** Construction contracts often permit the completion date to be postponed if the contractor is unable to comply with the construction contract date for reasons beyond its control. Project lenders prefer as much certainty as possible, but will usually accept postponement in limited specified circumstances. However, any provisions for postponement will need to be mirrored in the other project agreements, so that failure to achieve

completion under the construction contract does not lead to the project company being in breach of the concession agreement and other relevant project agreements where a specified completion date is relevant.

The lenders will expect the contractor to be obliged to pay liquidated damages for any delay at a level which will at least cover interest payable under the project loan agreement during the period of delay, together with (ideally) a sum sufficient to cover operating costs of the project vehicle during the period of delay. Most contractors will seek to include some form of limit on their liability for liquidated damages and, clearly, project lenders will need to take a view on an appropriate limit if this is acceptable in principle.

The construction contract will usually provide that completion occurs on the date upon which an independent consultant (usually appointed by the project company, subject to the lender's approval) certifies that the facility is complete and all commissioning and performance tests have been successfully passed.

**Force majeure:** Force majeure is a concept used to excuse a party to a contract from performing its obligations when prevented from doing so by events or circumstances beyond its control. There is further discussion of the significance of this with respect to project financing in section 3.5.

**Unforeseen ground risk:** This is the risk that construction may be slowed down or stopped and/or that changes in design or work methods may be required because the geotechnical condition of the site is not as could reasonably be expected. It can be used to trigger an increase in price or to delay the date by which completion takes place. The lenders will usually expect the contractor to take this risk.

**Warranties:** The contractor will normally be required to warrant the quality and fitness for purpose of its work. If the project company has given warranties of a construction nature to the concession grantor, the project lenders may want those warranties to be matched by corresponding warranties from the contractors.

**Insurance:** Insurance is important in a financing context, not least because the project lenders view insurance as part of their security. In the construction phase of a project, the contractor may be responsible for insuring the interests of the project company and lenders in addition to its own and sub-contractors' interests in respect of "contractors all risks". See section 7 for a more general discussion of project insurances.

**Consents:** The construction contract or contracts will usually provide who is responsible for obtaining the governmental consents and permits required to carry out the project. Amongst the key consents may be the consents or approvals from the regulatory authorities/host government in the host country that all local health and safety, environmental, fire and building regulations and requirements have been satisfied at "completion".

**Limitations on liability:** Contractors will usually attempt to limit their liability for breach of contract. Liability may be limited to a specified amount in respect of particular breaches or in some cases excluded completely. Project lenders will prefer either no limit at all or very high limits.

## Operating and Maintenance Agreements

Once the project is completed and commissioned it will then move into the operation stage. The operation of most projects will require an experienced and skilful operator and the performance of the operator in the performance of its tasks will be crucial to the overall success of the project. Both the project company and the lenders will be keen to ensure that the chosen operator is a company that has a proven track record of operating similar projects. Sometimes it is the case that the project company itself will operate the project although the lenders will want to be satisfied that it has both the experience and the necessary staffing, in place to undertake this role. More often, the operator is a third party that specialises in project and facilities operation and management and who will enter into an operating and maintenance agreement on arm's-length terms with the project company. The usual objectives of an operating and maintenance agreement will include:

- Allocating the risk of operating and maintaining the project to the operator (and thereby insulating the project company and the lenders from this risk)
- Ensuring that the project is operated in a manner that maximises the revenue-earning capacity of the project
- Ensuring that the facilities are operated and maintained at levels and according to budgets agreed with the project company and the lenders.

There are three basic structures for an operating and maintenance agreement.

**Fixed price structure:** Under this structure the operator is paid a fixed price for operating the project. If there are cost overruns on the operating budget, then the operator will bear this risk. Conversely, if the operator is able to save costs, then it will earn greater profits. Because the operator in this structure is bearing the operating risk, fixed price contracts tend to be more expensive.

**Cost plus structure:** under this structure the project company will pay the operator an agreed fixed fee together with the costs incurred by the operator in operating the project. The fixed fee will represent the profit for the operator, who will look to pass on all the costs of operating the project to the project company. Under this structure, therefore, the project company is assuming the risk of increased operating costs. In view of this, the project company would require the right to terminate the contract at relatively short notice if the operator was not operating the project on budget or efficiently. In most cases, however, a degree of operating risk will be assumed by the operator in order to incentivise the operator to perform efficiently and cost-effectively.

**Incentive/penalty structure:** under this structure the operator's remuneration will be tied to strict performance targets so that should the operator achieve the agreed targets it will be paid a bonus. Conversely, should the operator fail to achieve the agreed performance targets, it will suffer a penalty in the form of reduced compensation. The performance targets will be agreed in advance and set out in detail in the contract and will cover all principal aspects of the operation and maintenance of the project for which it is agreed the operator is responsible. It is usually the case that the maximum level of bonuses or penalties is capped in the contract.

Lenders invariably have a strong preference for the incentive/penalty structure as this not only insulates the project company from much of the operating risks associated with a project but also offers the best prospect of the project being efficiently operated on budget.

## Fuel Supply Agreements

Many projects will rely on an essential supply of fuel such as coal, oil, gas or wood in order to operate the facility. Both the project company and the lenders will be concerned to ensure that the project has access to a reliable and secure source of fuel for the entire duration of the project. Having obtained a secure source of fuel supply, the next key issue will be whether the project company is able to contract with an agreed supplier on a long-term basis on a pre-agreed price structure. If the project company is unable to achieve this, then it will be forced to purchase its fuel requirements on the spot market, which will expose it to both fuel availability and fuel price risks.

Having secured an agreed fuel supply, the project company will then need to make the necessary arrangements for the supply of the fuel to the project. This may involve a third party or the fuel supplier may assume this responsibility itself.

There are, broadly speaking, two different types of fuel supply agreements commonly used in project financing.

**Take-or-pay contracts:** under this arrangement the project company agrees to take delivery of an agreed volume of fuel at an agreed price over a specified period. If the project company does not take delivery of the agreed level of fuel, then it must nevertheless pay for it, although there is usually provision in the contract for the project company to take all or an agreed amount of such forgone fuel in a subsequent period. The fuel supplier's obligation is to supply the agreed level of fuel at the stipulated price.

**Sole supplier contracts:** Under this arrangement the project company agrees with a single supplier that it will purchase the project's entire fuel requirement from that supplier. However, the actual amount of the fuel requirement and the price to be paid for it will not necessarily be specified and, in any event, the project company will only pay for the fuel it actually takes. The fuel supplier, on the other hand, may or may not be obliged to supply all the project's fuel requirements.

Lenders are likely to prefer take-or-pay contracts as this secures for the project a secure source of supply at an agreed price.

## Sales/Offtake Agreements

These will be important where the project is dependent upon a guaranteed offtake for the project's products. A long-term sales contract may provide for sales on arm's-length terms, with the price calculated by reference to market prices at the relevant time, but not commit the purchaser to buy. Ideally, and this is what the lenders will be looking for, the project company would require a guaranteed cash flow from which to repay the project loan.

Different types of sales agreement have been developed to guarantee the amount and/or continuity of cash flow. The most popular of these are:

- “Pass through agreements”
- “Take-or-pay agreements”.

Where charges are calculated on a pass-through basis, they are calculated by reference to the costs incurred by the project company which are passed through to the buyer. This is a common structure in power projects. Typically, the costs passed through to the buyer can include the whole or any part of the costs of purchasing fuel or other commodities required for the project, repayments of principal to the project lenders, payments of interest to the project lenders, operating and maintenance costs, administrative costs, insurance costs and an amount representing the sponsor’s return on capital. In each case, the costs passed through are those relating to the period to which the payment by the purchaser/offtaker relates.

In a take-or-pay agreement, as is noted above, the buyer pays for supplies of the project company’s product, provided that they are available for delivery even if the buyer does not require them. There will often be a “hell or high water” provision which will attempt to establish that the buyer must pay despite non-performance by the seller or the existence of circumstances which would otherwise frustrate the contract. The type of sales/offtake agreement will depend, to a large extent, on the product in question. For example, in the gas industry, long-term offtake contracts are very common, whereas in the oil industry they are rare, most oil being traded spot or in the short futures market.

One of the issues that needs to be addressed when considering the use of take-or-pay (and similar) contracts is the enforceability of them. There are two potentially problematic areas. First, there is a risk that in some jurisdictions they may be attacked on the basis that they comprise a penalty. Second, they may be attacked on the basis of inadequacy of consideration. So far as English law is concerned, the better view is probably that most take-or-pay agreements will not be viewed as amounting to the imposition of penalties. On the consideration point, English law does not concern itself with the adequacy of consideration. However, other jurisdictions may (and probably do) take a different view on these issues and both the project company and the lenders will be concerned to check the exact legal position.

## Other Project Documents

Other relevant project documents, depending on the project, might include through-put agreements, tolling agreements, technology/operating licences, consultancy contracts, utility agreements, refining agreements and transportation contracts.

In all cases, however, it will be crucial to ensure that, so far as possible, all of these agreements fit together so that if, for example, the project company assumes obligations to one party, it is able to pass those obligations on to another party. It must be borne in mind that any residual liabilities resting with the project company will ultimately be incurred by either the project sponsors or the project lenders, as appropriate. Indeed, both of these parties will be keen to ensure that any such liabilities are in fact incurred by the party most able to manage and/or avoid them.

### 3.5 Force Majeure

The legal concept of force majeure is not a part of the English common law - it is a civil law concept that can be found in the Napoleonic Code. English law on the other hand has a doctrine of frustration of contracts. There are important differences. The doctrine of frustration is much narrower and occurs only when, without fault of either party, the contractual obligation in question has become incapable of being performed because the circumstances in which performance is called for would render it a thing totally different from that which was contemplated by the contract. In these circumstances, the parties will be discharged from all their future obligations under the contract and, in most cases, the loss as a result of such termination will lie where it falls- a result that may be neither fair nor appropriate.

Force majeure, on the other hand, is a less arbitrary and strict concept that nevertheless seeks to protect the parties from the effects of unforeseen events or circumstances. In the context of project financings, few participants are prepared to rely on the general law (even where the doctrine of force majeure is recognised by that law) and appropriate force majeure clauses will be included in all the key project documents setting out the basis on which parties may be excused from performance in specified circumstances (but not in the loan and

security documents, at least so as to benefit the borrower). Force majeure normally involves four criteria. The event or circumstance must:

- Make performance of the obligations impossible
- Be irresistible
- Be external in the sense of involving no fault or negligence on the party affected
- The party affected must have done everything in its power to perform the obligations

The precise terms of each force majeure clause will be negotiated between the relevant parties concerned and will reflect, partly, their respective bargaining positions as well as the overall circumstances of the transaction (an example is set out in Fig. 7). Further, depending on the particular circumstances, the clause may or may not apply to both parties to the contract. The clause, even in its most basic form, will be an essential tool in allocating specific project risks between the parties and will not necessarily apply to all of the obligations of a party under a contract (e.g. it may not apply to payment obligations if these are intended to be of a “hell or high water” nature).

## Specimen Force Majeure Clause

### Fig. 7

1. Subject to sub-clause (3), the Contractor shall have no liability for a consequence of any of the following events if that event and consequence was neither preventable nor foreseeable:
  - (a) a flood, storm or other natural event or
  - (b) any war, hostilities, revolution, riot or civil disorder or
  - (c) any destruction, breakdown (permanent or temporary) or malfunction of, or damage to, any premises, plant, equipment or materials (including any computer hardware or software or any records) or
  - (d) the introduction of, or any amendment to, a law or regulation, or any change in its interpretation or application by any authority or
  - (e) any action taken by a governmental or public authority or an agency of the Economic Community, including any failure or delay to grant a consent, exemption or clearance or
  - (f) any strike, lockout or other industrial action or
  - (g) any unavailability of, or difficulty in obtaining, any plant, equipment or materials or
  - (h) any breach of contract or default by, or insolvency of, a third party (including an agent or sub-contractor), other than a company in the same group as the Contractor or an officer or employee of the Contractor or of such a company or
  - (i) any other similar event to any of the foregoing.
- 2 For this purpose an event or the consequence of an event was neither preventable nor foreseeable if and only if the Contractor could not have prevented it by taking steps which it could reasonably be expected to have taken and the Contractor could not, as at the date of this Contract, have reasonably been expected to take the risk of it into account by providing for it in this Contract, by insurance or otherwise.
- 3 Sub-clause (1) does not apply unless the Contractor:
  - (a) notifies the Owner of the relevant event and consequence as soon as possible after it occurs;
  - (b) promptly provides the Owner with any further information which the Owner requests about the event (or its causes) or the consequence; and
  - (c) promptly takes any steps (except steps involving significant additional costs) which the Owner reasonably requires in order to reduce the Owner's losses or risk of losses.
- 4 It is for the Contractor to show that a matter is a consequence of an event covered by sub-clause (1), that the event and the consequence were neither preventable nor foreseeable and that it has satisfied the conditions set out in sub-clause (3).

The force majeure clause will specify the circumstances in which it will operate and will include the normal range of acts and circumstances, such as acts of God, embargos, natural disasters, earthquakes, lightning, tidal waves

and (frequently subject to debate) strikes. The circumstances described may or may not be expressed to be non-exhaustive in their scope. A party claiming force majeure will usually be required to take all reasonable steps available to it to investigate the effect of the event, and it is often the case that the duration of the contract will be extended during the subsistence of the event, subject to a long-stop date when the contract could be terminated by either party.

Although a force majeure clause is not considered by the English courts to be an exemption clause, its effect will be, arguably, the same in that a party may be relieved of an obligation or liability under the contract (either by extending or suspending the time period for compliance or extinguishing it altogether) once the clause has been triggered. It comes as no surprise, therefore, that force majeure clauses are governed by similar rules to those regulating exemption clauses. In both cases, the judicial tendency is to construe the clause against the party seeking to rely upon it. Thus, the party seeking to rely upon a force majeure clause must prove that a force majeure event out of its control has occurred which prevents it from performing the contract, and that it has taken all reasonable steps to mitigate the consequences of this.

### 3.6 Lender Requirements for Project Agreements

Because project agreements play a central role in allocating risks between the parties in any project financing, lenders will take great care to review the terms of the project agreements to satisfy themselves that these documents accurately record the agreed risk allocation. The following are some of the key points that lenders will look out for:

- If the lenders are taking security over the project agreement, can the project agreement be assigned or is the consent of the counterparty required?
- Does the project agreement prevent the project company from charging any of the project assets?
- What rights of termination does the counterparty have for breach by the project company? Are these rights too wide? (Note that the lenders would usually seek a right to step in and cure a breach by the project company under a direct agreement with the counterparty - see section 6.6)
- The existence of any expiry or revocation provisions in relevant licences and concession agreements
- If the project agreement includes force majeure provisions, is the project company protected by similar provisions in other project agreements where the project company itself has obligations that might be affected?
- Does the project agreement contain liquidated damages provisions for a default by the counterparty? If so, are they set at a high enough level and, more importantly, are they enforceable (and not void as a penalty as might be the case in certain jurisdictions)?
- Lenders will be extremely wary of clauses in project agreements that allow the counterparty to forfeit a concession or licence interest consequent upon the default of the project company; equally, they will be uncomfortable with a partial forfeiture right (often referred to as withering clause)
- Does the project agreement grant any pre-emption rights or options in favour of a third party in the case of a project company default or where the project company is seeking to terminate (or the lenders are seeking to enforce their security)?
- If the project agreement contains any set-off clauses allowing the counterparty to set off against any non-performance by the project company any sums payable by the counterparty to the project company, then the lenders will want to ensure that the provisions only cover non-performance in relation to the project agreement in question and do not cover other non-project or unrelated contracts
- Any clauses that make the project agreement's effectiveness conditional upon the occurrence of any events or the granting of any permits or consents will be viewed with caution and it is likely that the availability of finance itself will be conditional upon the lifting or satisfaction of such conditions
- Payment terms in project agreements must be precisely and carefully drawn, they must specify in which currency payment is required and where and how payment is to be made (usually direct to the lenders' agent); payments should be made without reduction or withholding for taxes, unless required by law and then in such circumstances grossed up
- Where appropriate, bonding requirement (especially in construction contracts) should be clearly stated and the lenders will want to be satisfied as to the strength of the bonding company or bank and that the bonds can be assigned to the lenders

- In a joint venture agreement and, are other joint venture parties given a charge over the project company's interest to secure any defaults by the project company? Contrast this with possible forfeiture rights mentioned above
- Are there any compulsory abandonment and "take out" provisions included in a project agreement between the sponsors that require one of them to assume the liabilities of the others in the event one wishes to withdraw from the project
- Governing law is frequently an issue as lenders in international financing transactions have a clear preference for English and New York law as opposed to local law; sometimes, especially with governmental entities, this is difficult for lenders to impose (see section 8.6)
- Arbitration clauses in project agreements are not popular with lenders that would, in most cases, prefer the legal certainty of the judicial system especially if the agreement is governed by English or New York law. However, in some jurisdictions it may be the case that the judicial system is not equipped to deal with sophisticated international disputes and in these circumstances arbitration may be the only sensible route for lenders.

## Section 4

# Project Structures

### 4.1 Approach to Financing

We have already seen that sponsors may choose to raise finance directly themselves for financing a project or indirectly through a project vehicle. If they choose the direct financing route then the financing may be raised either on conventional balance sheet terms or on limited recourse terms. Indeed, whichever of these routes is followed, the vast majority of projects worldwide that are debt financed are financed using loans as opposed to other forms of finance. That is not to say that other forms of finance are not available for projects; it is simply that the flexibility offered by loan structures makes them appealing for many project sponsors.

Although the great majority of limited recourse funding for projects is raised through the international capital markets by way of loans, usually on a syndicated basis, it is unlikely that the structure for any one project will be identical to the structure used in another project, although there may very well be strong similarities. There are, however, certain templates that have been developed by bankers, lawyers and others and this section will examine a number of the more commonly used templates. Some hypothetical projects will be used in order to make these structures more readily understandable.

There are two sources of finance for projects, apart from loans, that are sometimes utilised each one of those has a different structure from the conventional loan structure. These are outlined below.

### 4.2 Bonds

A potential source of finance for projects is the bond market. In the US, many projects have been funded by bonds and in the UK a number of the Government's Private Finance Initiative (PFI) projects were funded using bonds (the majority with monoline insurance cover and some where the bondholders were taking pure project risk). However, whilst the bond market has been an important source of funds for projects, it is likely that the vast majority of projects will be financed through loans rather than bonds as loans are seen as more flexible.

The main attraction of the bond market is the availability of long-term fixed rate funding, which is not only generally cheaper than bank borrowing but also offers the possibility of lengthening the repayment profile of the project debt which can improve the project's economics significantly. However, there are a number of disadvantages to using bonds to finance projects, including the following:

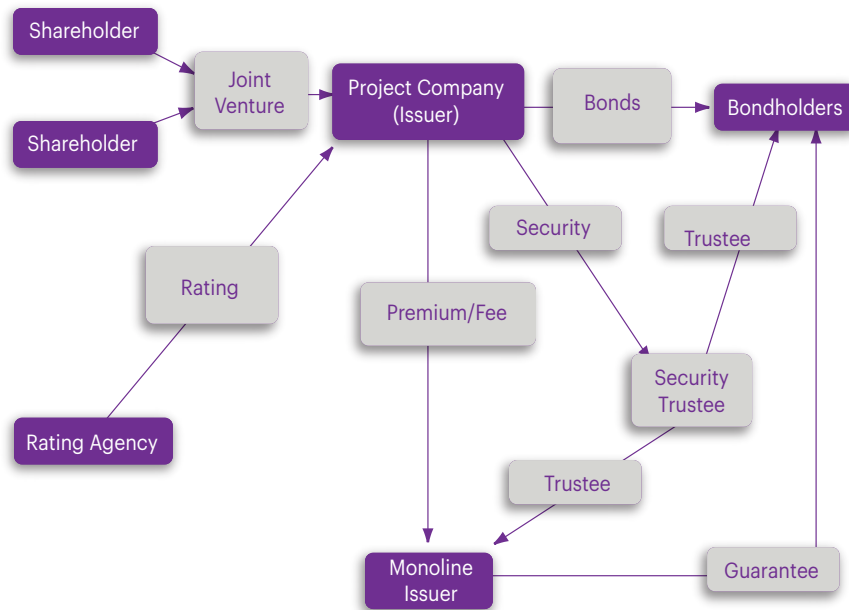
- Consents and waivers from the lenders are frequently sought in project financings and it is considerably more difficult to obtain these from (often unidentifiable) bondholders. Bond trustees will have certain discretions but these may not be wide enough to cover either material changes to project timetables etc. or the situation where a project runs into difficulties
- Bonds tend to be structured on the basis that payment by the bondholders is in one large sum at closing. This does not fit very well with most project structures where drawdowns by the project company are usually made periodically against, say, an engineer's or architect's certificate confirming completion of a relevant project milestone. The solution to this in most bond financings is to deposit the bond proceeds in a deposit account

with the bond security trustee and allow withdrawals by the project company in much the same way as drawdowns under a conventional loan structure. However, there are two difficult issues here. First, what happens to these funds if there is a default before they are withdrawn - do they belong to the bondholders, the lenders or the project company? Second, it will almost certainly be the case that the interest rate on the deposit account will be less than the interest rate payable on the bonds - the "negative carry effect" as it is commonly referred to. This can be a significant additional cost for the project and will need to be taken into account when measuring the attractions of a project bond

- Bonds tend to have less onerous warranties, covenants and events of default compared with loans. One of the reasons for this is that because, in many cases, bondholders are anonymous it is much more difficult, expensive and cumbersome to arrange meetings of bondholders for the purposes of determining what action should be taken as a result of any defaults. Accordingly, bond trustees have a vested interest in structuring bond documentation so as to avoid insignificant events amounting to defaults. This, of course, conflicts with the approach of project finance lenders whose usual approach is to cast warranties, covenants and events of default in very strict terms so as to maintain a high degree of control over the project.

Another reason advanced in favour of loans is the likely lack of appetite by bond investors for pure project risks. Typically the bond market likes to invest in sound companies with strong balance sheets rather than the speculative more risky ventures. This is not to say that some potential bond investors may not have an appetite for project risk (and there is clearly evidence that there is a project bond market in the US and that there is a market emerging in the UK), but they are unlikely to be able to satisfy anything other than a very small proportion of the projects looking to raise finance. One significant development in recent years, however, has been the liberalising of the US securities markets towards overseas issuers. A key change was the introduction by the US Securities and Exchange Commission (SEC) in 1990 of Rule 144A under the US Securities Act of 1933. Rule 144A sets forth a non-exclusive safe harbour from the registration requirements of the Securities Act for the resale of certain privately placed securities to large institutional investors ("Qualified Institutional Buyers" or "QIBs") by persons other than the issuer of such securities. Thus, transactions meeting the requirements of Rule 144A are not subject to the relatively onerous and expensive registration requirements of the Securities Act, including the requirement that financial statements of the issuer be reconciled to US generally accepted accounting principles. This has made it significantly easier and cheaper for a non-US issuer to tap the huge institutional capital markets in the US and a number of sponsors have taken advantage of this to fund all or a part of a project's financing requirements.

An example of a bond structure for a project is set out in Fig. 8.



### 4.3 Leasing

Lease finance is also a possibility, particularly in projects involving heavy capital goods. However, to date, leasing has only played a very small part in the overall financial equation and there are no real signs that the lessor market in the UK is opening up to large scale infrastructure projects. There are a number of reasons for this. First, the tax capacity available in the UK for investing in such projects is fairly limited. The available tax capacity quickly gets used up by the small to medium ticket lease market. At the big ticket end of the market, most of the financing has been done on assets such as ships, aircraft and (more recently) satellites. It is easy to see why institutional lessors prefer to finance these types of capital assets rather than investing in, say, turbines for a power project. Second, there are ownership liabilities that go hand-in-hand with leasing capital equipment that cannot always be satisfactorily laid off through documentation. Lessors traditionally are very risk averse creatures and, therefore, the prospect of becoming embroiled in complex disputes in a project where they may be the owner of one of the principal assets in question is not an appealing one to them. Third, the introduction of a lessor into a project structure will add considerably to the complexity of the overall structure and, therefore, to the documentation to an extent that the possible tax advantages may very well not be wholly justified by the additional complexities and expense involved.

In those areas where finance leases have been put in place for projects in the UK (mainly power stations and cable financings) they have usually been structured on the basis that the finance lessor does not take any project risk and the “tax risk” is shared with the lenders.

So far as the project risk is concerned, the finance lessor would generally look to receive a guarantee or letter of credit to cover it against any project risk that it may be exposed to. This principle is usually acceptable to all parties as these are risks that the lenders will be accustomed to assuming. The issue of tax risk, however, is not always so easy to solve. Tax risk is the risk that there is an adjustment in the tax regime in a manner which reduces or eliminates the anticipated tax benefit of the lease. The variation of tax rates, the availability of tax allowances, the rules on group relief etc., could all have an adverse effect on the lease cash flows and economics of the project as a whole. The problem, of course, for finance lessors is that if they are to assume any of the tax risks they are, in effect, also taking a credit risk on the project company and, therefore, in effect, in the project itself.

Another difficult issue with introducing leasing into project financing is the intercreditor arrangements between the

lenders and the lessor. Although both groups will share many of the same objectives in respect of the project, there will be areas where their interests conflict. A dramatic example of this would be where there is a default under the lease that entitles the lessor to terminate the lease and dispose of the plant and equipment being leased. This, of course, is something that would not be acceptable to the lenders and so an arrangement has to be reached between them whereby the lessor forgoes its right to terminate the lease automatically in these circumstances. One solution in such circumstances is for the lenders to set up a company to buy out the lease thereby allowing the lessor to be paid out. However, this will not always be an acceptable solution to the parties. Other difficult issues include the relative degree of control and supervision that may be exercised by each party. Intercreditor negotiations between lenders and lessors can be extremely difficult and time consuming, but this may be a price worth paying if the overall tax benefits for the project company are significant.

#### **4.4 North Sea Model**

As with most infrastructure projects, oil and gas projects in the North Sea can be conveniently split into the development/construction phase and the operating/producing phase. In the early days of financing North Sea oil and gas projects, lenders were wary of taking risks during the development/construction phase and would usually seek to pass these risks on to the sponsors. Traditionally, this was done in one of two ways. If the project financing vehicle was a special purpose vehicle and had no assets beyond the project being financed, then the lenders would require either a completion guarantee or a cost overrun guarantee or a combination of both. They would also be likely to require some form of management and technical assistance support so that they could feel comfortable that the project company would have the necessary management and technical resources available to it to undertake the project. Where the special purpose vehicle route is not used and instead the sponsor raises limited recourse funds directly, then the transaction is usually structured so that the loans are drawn down on the basis that they are full recourse loans to the sponsor until "converted" into limited recourse loans. Typically, conversion would take place when the lenders are satisfied that mechanical completion of the platform and other facilities has occurred and certain operating tests have been completed to the satisfaction of the independent engineers acting for the lenders. There will usually be a number of other conditions precedent to conversion. One of these conditions is likely to be the provision of the full security package for the loan (which will probably not have been provided at the outset so long as the loan remains a corporate loan) and another is likely to be the satisfaction of certain cover ratios immediately following conversion. Some loans have been structured on the basis that if the conversion of the full amount of the loan will result in any of the cover ratios being infringed, then only a proportion of the loan will be converted. (The use of cover ratios in project financing is discussed in section 8.5.)

As most developments in the North Sea are undertaken on a joint venture basis, this has implications for the lenders. Most of the financings in the North Sea have been structured on the basis that individual participants in a production licence are obliged to raise finance themselves for meeting their share of development and operating costs in connection with the project. In some production licences, this will mean that some of the participants will finance their share of costs from their own resources whilst others might raise limited recourse finance to finance their share. The principal security available for lenders is the interest of the participant in the production licence, the field facilities, the operating agreement (or joint venture agreement), any transportation contracts and sales/offtake contracts, the hydrocarbons being produced (but not whilst in the ground when they remain vested in the Crown) and the project insurances. This is a not untypical list of assets over which a lender would seek to take security, but in the context of the North Sea there are some problem areas for lenders. One of these is the likelihood that the operating (or joint venture) agreement among the participants is likely to contain forfeiture (or withering) provisions where an individual participant is in default in meeting cash calls or otherwise under the operating (or joint venture) agreement. A lender's security is, in these circumstances, likely to be subordinated to the interest of the other participants and this will diminish the value of the security for the lenders. Another issue for lenders is that, although it is possible to take charge over exploration and production licences, the Department of Energy will need to consent prior to any actual enforcement of this security and to approve any proposed transferee of a licence. Obviously there is an element of risk here for the lenders that this consent/approval may not be forthcoming.

Lenders have, however, over the years become quite comfortable with limited recourse financing in the North Sea and have shown an appetite for being prepared to accept the project, legal and political risks associated with lending on a limited recourse basis.

#### **4.5 Borrowing Base Model**

Whilst the norm is for projects to be financed on a single project basis, this is not exclusively the case. The borrowing base model is one that was developed in the US, in particular, in relation to the financing of oil and gas assets. Using this approach, borrowers would be entitled to draw down funds for financing one or more designated projects subject to the satisfaction of one or more overall borrowing base cover ratios being satisfied. In other words, so long as the aggregated future cash flows from all the projects covered the total loans and the servicing of them, the lender would not concern itself with the fact that, when viewed on a project-by-project basis, a borrower might not satisfy the usual cover ratios specified by the lender for a one-off project. In order to safeguard its loans, the lender would take security over all of the assets included within the borrowing base formula.

This approach has proved extremely popular especially with the smaller US that would be able to use excess equity on one project to cover either start-up costs or cost overruns on another project.

This borrowing base model has been used for financing projects in the North Sea but only on an exceptional basis. For the very reason that it particularly suits smaller investments, it can be quite a cumbersome and expensive structure to establish for larger investments particularly those having a longer maturity (for example, in excess of five years, which is likely to be the case for most investments in the North Sea). There are also difficult security issues that arise, particularly with respect to the cross-collateralisation aspects and persuading both the other field participants and the Department of Energy and Climate Change to accept this approach.

A variation on the borrowing base approach in the context of the North Sea has been the use of multi-field financing where, say, two or three fields are grouped together and financed at the same time. Although similar in approach to the borrowing base model, this is a less flexible approach in that it really amounts to one or more individual financings grouped together and cross-collateralised for security purposes. Some of the flexible features of the borrowing base approach will be available (e.g. use of surplus equity); others may not (such as use of loan proceeds).

The borrowing base or multi-field approach for the reasons stated above is likely to be of limited appeal to both sponsors and project lenders alike. The key advantages, however, of the borrowing base approach are:

- It is likely to be considerably cheaper in terms of establishment costs than the costs associated with establishing, say, three or four single field financings
- It is likely that less management time will be absorbed in administering the borrowing base facility
- Over-performing assets can be used to support under-performing assets and
- There may be flexibility within the borrowing base facility to substitute assets within the overall structure.

The disadvantages, on the other hand, are the cross-defaulting of all of the individual projects within the borrowing base structure, this is difficult to avoid. Also, it locks the sponsor into one group of lenders for all the relevant projects which might reduce both competition and flexibility.

#### 4.6 “Build Operate Transfer” “BOT” Model

Many projects around the world are structured and financed on the BOT model. There are a great number of varieties (and accompanying acronyms) and some of the more common are:

**DBFO:** design, build, finance, operate **DBOM:** design, build, operate, maintain

**BOT:** build, operate, transfer **DBOT:** design, build, operate, transfer

**FBOOT:** finance, build, own, operate, transfer **BOD:** build, operate, deliver

**BOO:** build, own, operate **BOOST:** build, own, operate, subsidise, transfer

**BOL:** build, operate, lease **BRT:** build, rent, transfer

The basis for all projects structured on the BOT model is likely to be the granting of a concession or licence (or similar interest) for a period of years involving the transfer and re-transfer of all or some of the project assets. There are many definitions describing BOT projects and one of the more illustrative is:

“A project based on the granting of a concession by a principal, usually a government, to a promoter, sometimes known as the concessionaire, who is responsible for the construction, financing, operation and maintenance of a facility over the period of the concession before finally transferring to the principal, at no cost to the principal, a fully operational facility. During the concession period, the promoter owns and operates the facility and collects revenues in order to repay the financing and investment costs, maintains

and operates the facility and makes a margin of profit.”

The key features are, therefore, the grant of a concession, the assumption of responsibility by the promoter (or sponsor) for the construction, operation and financing of the project and the re-transfer at the end of the concession period of the project assets to the grantor of the concession. A very common variant of the BOT model is the BOO (Build Own Operate) project which is structured on similar lines to a BOT project but without the re-transfer of project assets at the end of the concession period.

The concession agreement will, therefore, be the key project document and as such is likely to be examined with considerable care by the project lenders.

From the concession grantor’s point of view, BOT and similar projects have a number of advantages. The principal advantages are:

- They offer a form of off-balance sheet financing as the lending in relation to the project will be undertaken by the project company
- Because the concession grantor (usually a government or government agency) will not have to borrow in order to develop the project, this will have a favourable impact on any constraints on public borrowing and will potentially free up funds for other priority projects
- It enables the concession grantor to transfer risks for construction, finance and operation of the facility to the private sector and
- It is a way of attracting and utilising foreign investment and technology.

Under the concession agreements, the project company will usually own and operate the project for the duration of the concession. The revenue produced by the project will be used by the project company to repay the project loans, operate the concession and recover the investment of the sponsors plus a profit margin. Overall, the structure is similar to many other project financings in that the project loans will usually be provided direct to the project company (which is likely to be a subsidiary of the sponsors based in the host country) and the lenders will take security over (principally) the project company’s rights under the concession agreement together with any other available project assets.

The principal terms of a concession agreement for a typical BOT project are set out in Fig. 9.

Where the concession is in respect of a public transport facility, the concession may well provide for control of the level of charges, permitted adjustments and the duration of the period when charges can be levied. In return for any restrictions on charges, the concession grantor may agree to pay a subsidy or guarantee a minimum level of demand.

In the event of a default by the project company of any of the terms of the concession, or the occurrence of some other event which makes it unlikely that the project will be completed, the concession grantor will wish to have the ability to terminate the concession and/or take over the project company in order to complete the project itself. Of course, the project lenders will be concerned about any rights which the concession grantor has to terminate the concession agreement or to alter any of the terms of the concession agreement in a way that is likely to impact on their financing arrangements. They are also likely to want the ability to step in themselves and take over the project company’s rights under the concession agreement in certain circumstances (see section 6.6 for a further description of step in procedures and direct agreements).

An example of a BOT model for a telecommunications project is set out in Fig. 10.

## Principal Terms of a Concession Agreement

### Fig. 9

#### Concession grantor's obligations:

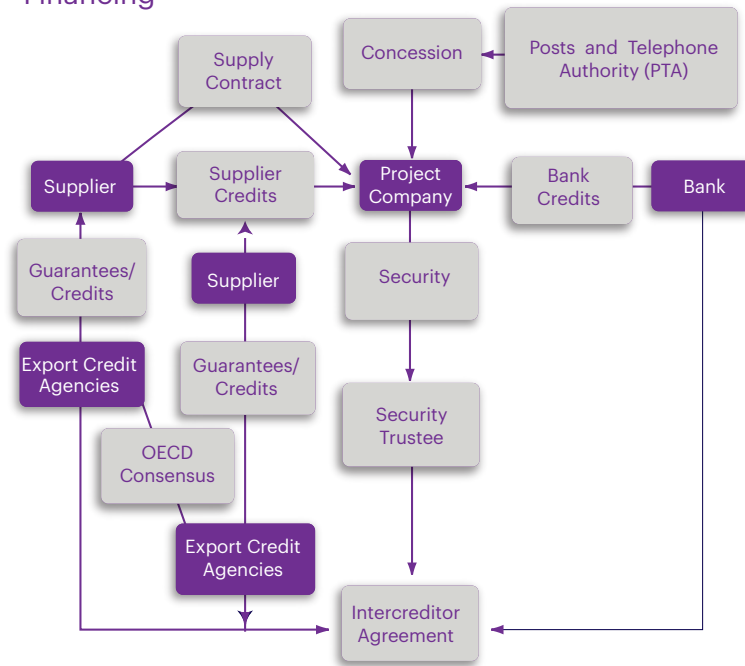
- Granting to the project company an exclusive licence to build and operate the project for the stipulated concession period
- Acquiring the project site and transferring it to the project company
- Making and obtaining required compulsory purchase orders for land
- Providing required consents and licences
- Making an environmental assessment
- Passing enabling legislation if required
- Constructing connecting and ancillary services (including roads)
- Granting, where applicable, tax concessions/holidays• (possibly) provision of raw materials and purchase of offtake
- (Possibly) an agreement to compensate the project company against certain risks such as uninsurable force majeure risks and change in law/tax risks and
- Granting to the project company the right to termination of the concession (with compensation) following a default by the concession grantor.

#### Project company's obligations:

- To acquire the project site from the concession grantor
- To finance, construct, operate and maintain the project to the contract specification (which may be variable by the concession grantor either with or without compensation)
- To comply with certain standards of construction work (and to permit the concession grantor access to the site for progress checks and monitoring)
- To complete the project by the specified date (and to provide guarantees or bonds as to performance)
- To comply with all applicable legislation. If the concession grantor (being a state entity) introduces new legislation that increases the cost to the project company of carrying out the project, then the concession agreement may include compensation terms for the project company
- Where appropriate, to enter into sales or other offtake contracts in respect of the project's products
- To permit the concession grantor to terminate the concession upon default by the project company
- To train the concession grantor's staff of the concession grantor prior to re-transfer
- (Possibly) to transfer the project assets to the concession grantor at the expiration of the concession.

Structure for a BOT Telecommunications Financing

Fig. 10



#### 4.7 Forward Purchase Model

Under this structure, sometimes known as an “Advance Payment Facility”, the project lenders will make an advance payment for the purchase of products generated by the project which will be deliverable to the lenders following completion of the project. The project company will utilise the proceeds of the advance payment towards financing the construction and development of the project. On delivery of the products following completion, the lenders will either sell the products on the market or sell them to the project company (or a related company of the project company) and use the proceeds to “repay” themselves. Alternatively, the project company may sell the products as sales agent for the lenders. Some structures entitle the project company to make a cash payment to the lenders in lieu of delivering products. A common feature of most structures, however, will be a requirement for an indemnity by the lenders for any loss or liability that the lenders may suffer or incur as a consequence of taking title to the products in question.

Sometimes a more complicated structure is used whereby another company, jointly owned by the lenders, acts as a vehicle through which the funding is passed. In such a case this vehicle will assign the benefit of the forward purchase agreement and any related agreements to the lenders by way of security. The introduction of this further stage is usually designed to remove the lenders from the commercial arrangements relating to the sale of products, often for regulatory reasons, but sometimes because the lenders will not want to take title to the products.

This type of structure has frequently been used as a way of circumventing borrowing restrictions. The argument is that a structure such as this does not amount to a borrowing nor would it infringe negative pledges and similar covenants. Whether or not this in fact achieves either or both of these objectives will depend on the legal and accounting rules in the particular country, but certainly the trend in the accountancy world these days is to look at the substance of the structure rather than accept the strict application of the documents.

Another reason for using this structure might be in circumstances where it is not possible for the lenders to obtain a perfected security interest in the assets being financed and the lender are not prepared to finance the project on an unsecured basis. This type of arrangement, if it is legally effective, will give the lenders title to the products produced by the project which is at least the equivalent of (and probably better than) security over those assets.

Lenders participating in such transactions will obviously be concerned to ensure that, if a financing vehicle is not used, they are entitled under banking regulations applicable to them to participate in such “trading” activities. They will also be concerned that in the case of certain types of assets, such as oil and related products, they are not exposing themselves to any liabilities (e.g. pollution) that may arise through ownership (however briefly) of those assets. The existence of an indemnity from the project company will give some comfort on this issue, although the lenders will still be assuming an additional credit risk (in respect of the project company) for any amount that might be payable under this indemnity.

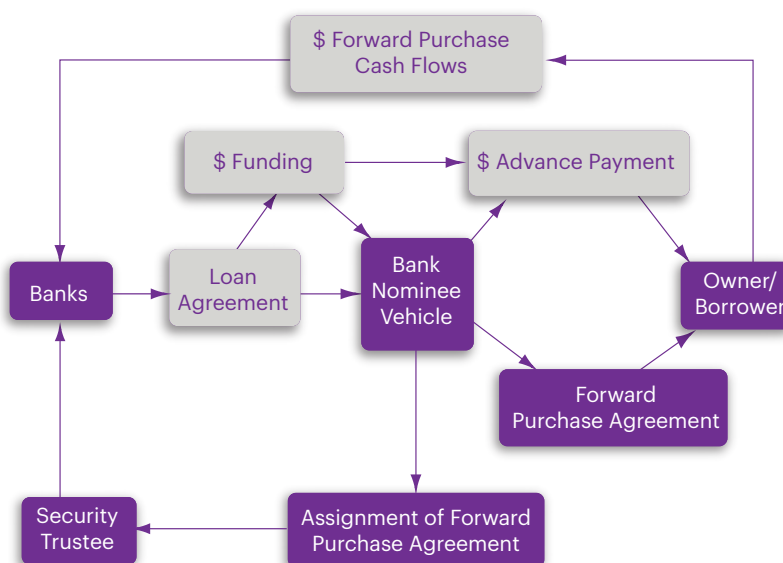
A similar structure is the “production payment” model frequently used in the US to achieve significant tax advantages. Under this structure the lenders (or a vehicle established by them) acquires a production (i.e. ownership) interest in a project. The lenders will then be entitled to an agreed share of the project’s production proportionate to the production payment that the lenders have acquired. The structure usually obliges the project company to repurchase the products delivered to the lender or to sell the products as agent for the lenders. The interest acquired by the lenders can either be an interest in the project itself (that is a right to, say, the agreed proportion of oil and gas or minerals that are produced) or an interest in the proceeds of sale of the products.

The essential difference between the forward purchase structure and the production payment structure is that in a forward purchase transaction there is merely a contract to deliver and take the products as and when produced, whereas in a production payment transaction there is a conveyance or sale of the products (or the proceeds of sale of the products) in exchange for the purchase price.

Both of these structures were occasionally in the very early days of financing in the North Sea Financing but have not been seen in the North Sea since. They are, however, still popular for certain types of projects (e.g. minerals).

An example of a forward purchase structure is set out in Fig. 11.

Structure for a Forward Purchase Transaction Fig. 11



# Section 5

## Sharing Of Risks

### 5.1 Identification and Allocation of Risks

The essence of any project financing is the identification of all key risks associated with the project and the apportionment of those risks among the various parties participating in the project. Without a detailed analysis of these project risks at the outset the parties will not have a clear understanding of what obligations and liabilities they may be assuming in connection with the project and, therefore, will not be in a position to consider appropriate risk mitigation exercises at the appropriate time. Considerable delays can occur and expense can be incurred, should problems arise when the project is under way and arguments ensue as to who is responsible.

Thus, from the sponsor's point of view, it will be particularly concerned to ensure that it has identified and understood all the risks that they will be assuming in connection with the project. It will want to be certain that it is able to manage and monitor these risks effectively and, where they are not able to do so, either to pass them on to another party involved in the project that is better able to manage any particular risks (perhaps a supplier, contractor or purchaser of products) or, where this is not possible for any reason, perhaps to find some other way of managing the risk such as by taking out insurance or, more radically, altering the structure of the project to extinguish the risk or at least reduce it.

From the lenders' perspective, they will have similar concerns. Additionally, they will have the following concerns:

- in assuming any risks associated with a particular project, they will need to be satisfied that there are no regulatory constraints imposed on them by any of the authorities that regulate their activities or pursuant to laws applicable to them
- they may have to report non-credit risks assumed by them in connection with their activities to their regulatory authorities
- generally speaking, the more risk that lenders are expected to assume in connection with a project, the greater the reward in terms of interest and fees they will expect to receive from the project.

The task of identifying and analysing risks in any project is not one that can be left to any one party or its advisers. Rather, it is likely to involve the project parties themselves, accountants, lawyers, engineers and other experts who will all need to give their input and advice on the risks involved and how they might be managed. Only once the risks have been identified can the principal parties (the sponsors and the banks) decide who should bear which risks and on what terms and at what price.

### 5.2 Ground Rules

There are some ground rules that should be observed by the parties involved in a project when determining which party should assume a particular risk:

- A detailed risk analysis should be undertaken at an early stage
- Risk allocation should be undertaken prior to detailed work on the project documentation
- As a general rule, a particular risk should be assumed by the party best able to manage and control that risk, e.g. the risk of cost overruns or delay on a construction project is best managed by the main contractor; in a power project, the power purchaser (if a state entity) is in a better position than others to assume the risks associated with a grid failure and consequent electricity supply problems for any reason
- Risks should not be "parked" with the project company, especially where the project company is a special purpose vehicle. The point here is that, where there is a disagreement between say, the fuel supplier and a power purchaser in a power project over which party should assume a particular risk, there may be a temptation to park the risk in question with the project company. However, this is simply storing up problems for the future as the project company will rarely be in a position to manage or control that risk, let alone pay for it.

### **5.3 Categories of Project Risks**

The following is a list of some of the key project risks encountered in different types of projects. Of course, not all of these risks will necessarily be encountered in each project, but it is likely that most participants in projects will need to consider one or more of these risks and decide by whom these risks are to be assumed and how. It has already been seen in section 3 that, once these risks have been identified, it is through the various contractual arrangements between the parties, and insurance, that these risks are, for the most part, apportioned and assumed.

## Construction/Completion Risk

In any infrastructure project involving a construction element, this is likely to be one of the key risks. Will the project be built on time, on budget and in accordance with the applicable specifications and performance criteria? In assessing these risks, the lenders in particular will be looking at the overall contract structure, the identity of the parties involved and factors such as whether the technology involved is proven. The key areas likely to be of concern to the lenders are:

- **Type of contract:** is the construction contract a “turnkey” contract with a prime contractor or are the design and works being undertaken by a series of consultants and contractors with project management being undertaken by the project company? Lenders have a strong preference for turnkey arrangements as this avoids gaps appearing in the contract structure and disputes between the contractors as to where particular responsibilities lie
- **Price:** lenders have a clear preference for fixed-price lump sum contracts. They will wish to be confident that the facility can be completed within the funding which has been committed and that cost overruns are the responsibility of the contractor. If there are to be any changes to the contract price, then the lenders will want to have a say on this particularly if this is as a result of changes to specifications on the part of the project company

Risk Groups

Fig. 12



- **Completion:** the lenders will want to ensure that there is a fixed date for completion with minimum ground entitling the contractor to extend the completion date. If there are any delays, then the lenders will want to see liquidated damages in an amount sufficient to cover the project company’s costs of servicing the loans and operating costs during the period of the delay. In practice, however, it is seldom possible to obtain full coverage in terms of liquidated damages for an unlimited period. What is generally negotiated is a fixed per diem amount subject to a cap. Under English law, a distinction is drawn between liquidated damages, which are a genuine pre-estimate of the damage likely to result from the breach of contract (failure to complete on time) and which are enforceable, and clauses which penalise the contractor unfairly and are unenforceable. A provision will generally be considered to be a penalty if the amount payable under the contract is extravagant and unconscionable compared with the greatest loss that could (at the time the contract was entered into) be

conceived to flow from the breach. The wording used in the contract will be irrelevant; it is the substance of the clause which will be taken into consideration. One factor which may distinguish the contract provision as a penalty is if compensation is by way of a single lump sum which is payable on the occurrence of several events some of which would give rise to trivial damages, others of which would give rise to substantial damages. The lenders should, therefore, make sure that the liquidated damages are set at a carefully calculated and realistic rate in order to satisfy themselves that the provisions are enforceable.

Further, the risk of any delays that are not the fault of either the project company or the contractor will need to be addressed in any other project contracts that the project company is a party to. For example, if there is a delay as a result of a force majeure event that delays construction, then the force majeure provisions in any offtake contract under which the project company is required to deliver products from the project should take account of such delays and relieve the project company of liability:

- **Force majeure:** these provisions must be reasonable and the contractor should take all reasonable steps to circumvent the problem. They must not arise as a result of action or inaction on the part of the contractor or members of the contractor or people under the contractor's control. Further, where insurance cover is available for force majeure events, then the lenders will want to see such insurance cover taken out or, if it is not, for others (the sponsors) to assume responsibility. See section 3.5 for a more detailed consideration of force majeure clauses
- **Bonding requirements:** the lenders will be concerned that appropriate performance and defects liability bonding is in place and from institutions with acceptable credit ratings. The amount of such bonds will depend upon the credit rating of the contractor and any parent company guarantees offered, and the payment profile during the contract. It is not uncommon for performance guarantees to be in the range 10 to 20 per cent of the contract price (although in the US performance bonds of 100 per cent of the contract price are not uncommon). The lenders will expect the benefit of these bonds to be assigned to them
- **Supervision:** the lenders will require that their own engineer is entitled to inspect the construction works, receive reports and attend tests throughout the construction period and, where stage payments are used, that their engineer verifies that the appropriate works have been completed at the relevant time before the relevant drawdown under the facilities agreement is made.

It will usually be the case that all disbursements of the loan for construction-related payments (and indeed other significant items) will be channelled directly through the facility agent to the relevant payees. The lenders will not usually be prepared to release drawdowns direct to the project company and take the risk that these monies are not disbursed by the project company. (See section 8.2 for a more detailed description of the project accounts mechanism.)

If the lenders are unable to achieve these objectives (or at least most of them) in a manner satisfactory to them, then it is likely that they will look to the sponsors for some kind of completion support. They may well do so anyway in the case of sponsors who are undertaking the role of contractor.

## Operating Risk

This is the risk that the project facility can be operated and maintained at levels and otherwise in a manner in accordance with the design specifications. Of particular concern to the lenders will be the following:

- Who is the operator? Does it have a proven track record of operating and maintaining similar projects efficiently?
- If the project company is also operating and maintaining the facility, does it have the necessary staff and skills?
- How are operating costs to be managed? Who is responsible for increases in operating costs?
- Is the operator also responsible for maintaining the facility or is there a separate maintenance contractor?
- The lenders will also be concerned that force majeure provisions in the operating agreement tie in with the other project agreements to which the project company is a party. In particular, any delays in production as a result of operating problems should not be the risk of the project company
- As with construction contracts, the lenders will be concerned that any breach of the operating agreement by the operator will give rise to liquidated damages payable to the project company at an acceptable level.

Not every project will have an independent operator and sometimes the project company itself will also be the operator. Whilst this reduces the risk of an additional party default, clearly the lenders will want to be satisfied that the project company has the experience and resources available to it to operate the project facility properly and to manage this risk. To this end, lenders may require sponsors to enter into agreements with the project company

whereby the sponsors agree to provide management, personnel and technical assistance.

## Market Risk

There are two principal elements here. First, there is the risk of whether or not there is a market for the project's products of the project. Second, that the price at which the products can be sold is sufficient to service the project debt. Many projects are structured in such a way that long-term offtake contracts are entered into with third parties on terms such that this risk is wholly or partially covered. For example, in an independent power project the project may be structured so that a power purchase contract is entered into with the local state energy authority with a pricing mechanism containing a component that covers the operating costs of the project company as well as its debt servicing requirements (usually called a "capacity charge" or "availability charge"). Subject to assuming the credit risk of the offtaker in these circumstances, a properly structured contract in these terms should remove most of the market risk for the lenders.

Where there are no such guaranteed offtake arrangements, then the lenders are likely to have the following concerns:

- Is there a ready market for the project's products? For example, in an oil project the market risk is more a price risk than a purchaser risk as there is an international spot market for oil. Of course, there may be a problem if the field is producing low grade hydrocarbons as they will not be so readily saleable. Gas on the other hand is traditionally not traded on a spot basis but on a long-term basis (largely because it is considerably more difficult to handle and therefore to transport) and therefore lenders are much more likely to be looking at long-term gas offtake contracts
- In power projects in emerging markets electricity is invariably sold under long-term purchase agreements (usually entered into with the local state energy authority). A recent development has been the structuring and financing of a number of so-called merchant power plants, which do not have the benefit of long-term offtake contracts, although these are likely to be restricted to projects in certain developed countries having specific (favourable) characteristics
- Part of the market risk will be how the products are going to be transported or delivered to the purchasers. Obviously this will depend greatly on the type of project in question. From the lenders' perspective, they will want to see proper arrangements in place so that there is no (or little) risk of them assuming the risks of delays in the transportation process.

One of the ingenious devices conceived (or perhaps borrowed) by project financiers for managing market risk in some projects is the use of take-or-pay contracts. This is a contract entered into between the project company and a third-party buyer whereby the third party agrees to take delivery of a minimum amount of products of the project over a period of years and to pay for those products whether or not it actually takes delivery of those products. In such contracts the lenders will try and ensure that these contracts contain "hell or high water" clauses so that the buyer is obliged to pay for the products notwithstanding any default by the project company or otherwise. The incentive for the buyer to enter such contracts will be the desire to obtain certainty of supply in circumstances and at a price that otherwise might be unavailable to it. Alternatively, the buyer may be a shareholder or otherwise related to the project company such that it is prepared to assume certain project risks. Take-or-pay contracts can be extremely valuable and can amount, in effect, to a virtual financial guarantee of the loan during the operating period.

Take-or-pay contracts have been used in a great many project financings and in many different guises. Most commonly, they are used as a means of financing pipelines and other projects where the project's assets are being shared (and therefore financed) by a number of different users. Many power purchase agreements are effectively structured on a take-or-pay basis.

See section 3.4 for a further discussion on some of the legal issues concerning take-or-pay provisions.

## Political Risks

In any cross-border financing, banks take a "political" risk in the sense that a collapse of the existing political order in the borrower's country or the imposition of new taxes, exchange transfer restrictions, nationalisation or other laws may jeopardise the prospects of repayment and recovery.

In project financing, the political risks are more acute for many reasons, including:

- The project itself may require governmental concessions, licences or permits to be in place and maintained, particularly where the project is for power generation, transport, infrastructure or the exploitation of the country's

natural resources – oil, gas and minerals

- The project may be crucial to the country's infrastructure or security and accordingly be more vulnerable to the threat of expropriation or requisition - power projects, airports, seaports, roads, railways, bridges and tunnels are obvious examples.

The term political risk is widely used in relation to project finance and can conveniently be defined to mean both the danger of political and financial instability within a given country and the danger that government action (or inaction) will have a negative impact either on the continued existence of the project or on the cash flow generating capacity of a project. Different projects and different project structures will obviously encounter different types of political risk. However, examples of events that might be classified as political risks are set out in Fig. 13.

## Political Risks

### Fig. 133

- Expropriation or nationalisation of project assets (including the shares of a project company)
- Failure of a government department to grant a consent or permit necessary for starting, completing, commissioning and/or operating a project or any part of it
- Imposition of increased taxes and tariffs in connection with the project, including products generated by the project, or, perhaps, the withdrawal of valuable tax holidays and/or concessions
- Imposition of exchange controls restricting transfer of funds outside of the host country or availability of foreign exchange
- Changes in law having the effect of increasing the borrower's or any other relevant party's obligations with respect to the project, e.g. imposing new safety, health or environmental standards or other changes in law that result in changes being necessary to the design of any equipment or process
- Politically motivated strikes
- Terrorism.

There is no single way in which a lender can eliminate all project risks in connection with a particular project. One of the most effective ways of managing and reducing political risks, however, is to lend through, or in conjunction with, multilateral agencies such as the World Bank, the European Bank for Reconstruction and Development and other regional development banks such as the African Development Bank and the Asian Development Bank (multilateral agencies and their role in project financing is discussed further in section 9). There is a view that, where one or more of these agencies is involved in a project, then the risk of interference from the host government or its agencies is reduced on the basis that the host government is unlikely to want to offend any of these agencies for fear of cutting off a valuable source of credits, in the future. This is a persuasive argument and certainly one that has some historical basis. For example, when countries such as Mexico and Brazil were defaulting on their external loans in the early 1980s, they went to some lengths to avoid defaulting on their multilateral debts, whether project-related or not.

Other ways of mitigating against political risks include:

- Private market insurance, although this can be expensive and subject to exclusions. Further, the term that such insurance is available for will rarely be long enough
- Insurance from national export credit agencies such as ECGD in the United Kingdom, COFACE in France, HERMES in Germany etc., Export credit support these days comes in a variety of different forms and can include guarantees or and/or direct loans and interest subsidies. However, these will only usually be given in connection with the export of goods and/or services by a supplier to the project. However, as with lending in conjunction with multilateral agencies, co-financings involving national export credit agencies probably enjoy a similar "protected" status (ECAs and their role in project financing is discussed further in section 9)
- Obtaining assurances from the relevant government departments in the host country, especially as regards the availability of consents and permits
- The central bank of the host government may be persuaded to guarantee the availability of hard currency for export in connection with the project
- As a last resort, but an exercise which should be undertaken in any event, undertake a thorough review of the

legal and regulatory regime in the country where the project is to be located to ensure that all laws and regulations are strictly complied with and that all the correct procedures are followed with a view to reducing the scope for challenge at a future date

In some countries, particularly developing countries, which are keen to attract foreign investment, host governments (or their agencies) may be prepared to provide firm assurances on some of the above matters to foreign investors and their lenders. Obviously such assurances are still subject to a performance risk on the host government concerned, but at a minimum they can make it very difficult, as well as embarrassing, for a government to walk away from an assurance given earlier in connection with a specific project and on the basis of which foreign investors and banks have participated in a project. The scope of these government assurances is discussed further in section 6.7.

## Reserve/Production Risk

In some projects such as hydrocarbons and minerals projects, one of the most important risks will be the reserves risk and, allied to that, the degree of difficulty in extracting those reserves. As part of the process of evaluating such a project, the lenders would invariably employ a reserves engineer to analyse the geology and structure of a hydrocarbons reservoir or minerals deposit, as appropriate.

As part of this process the lenders would expect to see the reserves classified by the engineer into various industry-wide classifications. Thus, a lender would expect to see a classification into “proven reserves” (or “P90 reserves” the likelihood of recovery exceeding the stated figure is deemed to be 90 per cent), “probable reserves” (“P50 reserves” ultimate recovery is 50 per cent likely to be either greater or less than the stated value) and “possible reserves”. In calculating how much they are prepared to lend on such a project, lenders will generally only take account of proven reserves and occasionally (in an otherwise robust project) a small slice of probable reserves.

The lenders will not only be concerned about the classification of reserves but also the likely degree of difficulty in extracting those reserves particularly where new technology or drilling is involved. Thus, even in the case of proven reserves, these will be subject to the further caveat that they must be “economically recoverable”. A typical definition of economically recoverable reserves might be:

“Economically Recoverable Reserves” means, at any time, those quantities of proven reserves of crude oil, gas and natural gas liquids which are projected and estimated in the most recent banking case as being capable of being won and saved from wells in the field under existing economic and operating conditions, that is, prices and costs prevailing at that time during the period from the effective date of such banking case until the final economic production date, being the day preceding that six-month period during which it is estimated and projected in the current banking case that forecast net cash flow will be negative for such six-month period and will remain negative on a cumulative basis thereafter.

Even when the lender has established to its satisfaction that it is only lending against proven reserves that are economically recoverable, the prudent project lender will not lend against 100 per cent of those reserves and will exclude the “reserve tail” (the last 25 per cent or 30 per cent) as a further comfort zone.

## Counterparty Risk

This category of risk overlaps with a number of the categories above but it is convenient to isolate it by way of example. What is meant by this is the risk that any counterparty with whom the project company contracts in connection with a project might default under that contract. As has been seen above, this might be the contractor, a bank providing performance and/or defects liability bonding for a contractor, a supplier of goods and/or services to the project company, a purchaser of products from the project company, an insurer providing insurances in connection with the project, a third party providing undertakings or support in connection with the project and a host of other relevant parties.

If any of these parties defaults in the performance of their respective obligations, then the project may run into difficulties. The first difficulty may be in connection with litigation over the contract in question which may be expensive and time consuming to sort out. Even if the litigation is successful or an agreed settlement can be achieved avoiding litigation (whether using alternative dispute resolution procedures or otherwise), there is still the financial risk that the counterparty will have the resources available to make the payment due. In many cases lenders (and indeed sponsors) will recognise this risk and where the project company is contracting with companies that are perceived to be financially weak, the lenders will demand either parent company guarantees (if

available) or even bank guarantees or letters of credit to support these obligations.

Finally, as has been noted in section 1.3, breach of many of these obligations in the project contracts will give rise to damages-based claims which are unliquidated claims. Thus, the basic common law damages rules will apply in common law-based jurisdictions which can seriously affect the value of such claims.

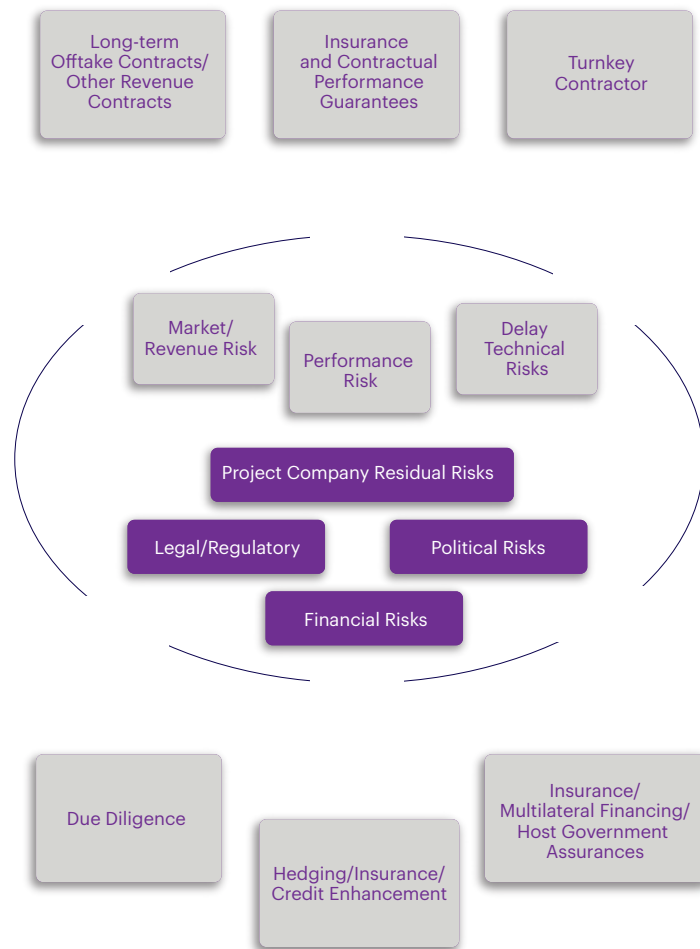
### Legal and Structural Risks

Again, there is some overlap with both of these risks with some of the risks itemised above. Legal risk is the risk that the laws in the host jurisdiction (and any other relevant jurisdiction) will be interpreted and applied in a way consistent with the legal advice obtained from lawyers in the relevant jurisdiction at the outset of the project. (Change of law is really dealt with under political risks.) Of particular concern will be the laws relating to security and, in particular, the security taken by the project lenders over the assets of the project. Not all jurisdictions have available to them the concept of the floating charge (or equivalent) and the ability to appoint a receiver which is so convenient for project finance structures. In many jurisdictions, particularly in the lesser developed countries, many basic concepts of security are not well developed. Consequently, local legal opinions may only be of limited comfort and, in such cases, the lenders may well have to discount the value of such security completely or in part at least.

Structural risk is the risk that all of the elements of a complex project structure fit together in the way envisaged and that the various legal advisers and other experts involved have done their job properly. Complex projects can involve hundreds of interlocking documents running to many tens of thousands of pages and the possibility of error and oversights cannot be completely ignored. The availability of professional negligence insurance policies will obviously provide some comfort for lenders here but even the largest firms of professional advisers are unlikely to have sufficient cover for the largest projects.

Risk Mitigation for Sponsors

Fig. 14



# Section 6

## Security for Projects

### 6.1 Approach of Lenders

Security plays an important role in project financing and problems encountered in perfecting security can often necessitate changes in how a project is to be structured. As in most project financings the lenders will have no recourse to the project company's assets, other than the project assets, and will look primarily to the cash flow generated by the project to repay loans to the project company, it is crucial in project financing for lenders to ensure that valid and effective security interests are taken over all of the project assets. If problems do arise with the project and the lenders are forced to pursue their security then, in the absence of any shareholder guarantees or other tangible support, enforcing their security over the project assets will be the only opportunity for the lenders to recover their loans.

If the project company is a special purpose vehicle, it is likely that the lenders will have taken security over all of its property and assets and will have control of those assets to the exclusion of other creditors. In these cases they may be able to petition to wind up the project company and prove as a creditor in the winding-up. However, if there are no assets outside of the project, then this is not likely to prove a fruitful course of action for the lenders. Because the value of the project assets is primarily determined by the cash generating power of the assets, and because the project lenders are only likely to seek to wind up the project company if something has gone wrong with the project, a winding-up is unlikely to recover the full amount of any loan to the project company, particularly if the project is incomplete (e.g. a half-built power station).

Where the project company is not a special purpose vehicle and has other assets apart from the project assets, then it is likely that these assets will have been ring-fenced so that the lenders' actions will be limited strictly to enforcing their security against the project assets alone. Normally this is achieved by providing in the loan documentation that the lenders are prevented from petitioning to wind up the project company or taking other similar action that would allow them to threaten the continued existence of the project company or to pursue the other assets of the project company. This principle of ring-fencing individual projects is of fundamental importance to sponsors and project companies. Indeed, it is also important for a sponsor's lenders who may be concerned to ensure that projects that they have financed are not allowed to stand as collateral for, or be threatened by, other lenders to the project company. This is one of the main reasons why special purpose vehicles are used for project financing; the more so given that in most jurisdictions a shareholder will not be responsible for the debts of its subsidiaries (although in certain jurisdictions there are limited circumstances in which it is possible to pierce the corporate veil of limited liability and this will be something that sponsors will need to investigate in each jurisdiction in which they participate in projects).

### 6.2 Reasons for Taking Security

In most cases where lenders take security over assets that they have financed (for example, ships and aircraft) the prime motivation for taking such security will be aggressive; that is, to ensure that the lenders are able to sell the asset in question on an enforcement of its security. In the case of moveable assets such as ships and aircraft, in most jurisdictions this will not pose insurmountable problems for the lenders (although in some jurisdictions this can be an expensive and time-consuming exercise). Likewise, with most real property there will usually be a buyer, at a price, depending on the state of the local property market and the type of property in question. However, selling a half-built tunnel or power station is likely to prove considerably more difficult, if not impossible. There is unlikely to be a long queue of interested buyers and the position may be made even more difficult for the lenders in those countries where the consent of government agencies or public sector bodies is required. It may well be the case that the only buyer is the host (or local) government, and then at a fire-sale price! The predicament of the lenders can be further exacerbated in those jurisdictions where sale is not a remedy directly available to the lenders and can only be undertaken through cumbersome, time-consuming and expensive judicial proceedings.

With most projects, however, the ability to sell the project assets will not be the prime motivation for taking security in the first place. Instead, they will be looking to achieve [though other] the lenders objectives. First, they will see a comprehensive security package as a defensive mechanism designed both to prevent other (possibly unsecured) creditors taking security over the assets that they have financed and to prevent other creditors trying to attach

those assets or take other enforcement action in respect of those assets. The reasoning is that if the lenders cannot sell the project assets and repay themselves out of the proceeds, then they certainly don't want any other creditors interfering with those assets in any way. This is a fine principle in as far as it goes, but often it is not watertight. For example, the mere existence of the lenders' security over the project assets would not ordinarily prevent another creditor of the project company, for example, petitioning to wind up the project company for non-payment of a debt or non-performance of an obligation. Ordinarily, the project lenders will attempt to structure matters such that there are no other significant creditors outside of the project itself. One way in which lenders will seek to achieve this is by limiting the activities of the project company to the project in question (see section 2.2 for examples of the type of restrictions frequently imposed on special purpose vehicles). This is one of the reasons why special purpose vehicles are so popular in the financing of projects.

However, it is likely to prove impossible to eliminate all third-party creditors and, therefore, there will always be a threat that third-party creditors could threaten a project, for instance, by obtaining a charging order against a vital project asset to enforce a judgment debt owed by the project company. If there are one or two particularly large creditors, it may be possible to bring them within the security package in some way, but this is likely to be more difficult, if not impossible, with smaller trade creditors. In practice, this is a risk that most lenders will accept and in the worst case they may simply face the prospect of paying off a difficult creditor. The existence of other security interests over the same assets can also be an important issue, especially in those jurisdictions where effective subordination of security interests is either not recognised or not effective. Whether or not other creditors can take a competing (or subordinate) security interest in the same project assets will, of course, depend on the security laws in the jurisdiction relevant to the particular security (usually the jurisdiction where the asset is located, but see section 6.9). The position is likely to be more precarious in those jurisdictions that do not have a central public registration system for the registering of security.

The continued objective is a desire on the part of the lenders to be able to control the destiny of the project should things start going wrong. The lenders will hope that through their security interests they will be able to wrest control from the project company and determine themselves how the project should proceed. They have the option to complete the project (if necessary) and then operate it in order to generate the cash flow needed to repay themselves. However, the ability of the lenders to achieve this aim will depend to a large extent on the jurisdiction in which the principal project assets are located. In those jurisdictions that allow secured lenders to appoint a receiver to step in and effectively run a company's business as part of an enforcement of security, the lenders should be able to achieve their objectives. This is likely to be possible to a greater or lesser extent in most common law-based jurisdictions where secured lenders are given the right, either through the security document itself or under the general law, to appoint a receiver, or a receiver and manager over the assets over which they have security. However, where the relevant local law does not recognise the concept of receivers or other creditors' representatives taking control of the project assets then the aims of the lenders are likely to be frustrated. For example, this is likely to be the case in many civil law jurisdictions, and in the US possessory management of a company through a receiver cannot displace the powers of the directors of the company. In these circumstances, the lenders only likely protection is through the local courts or judicially appointed officials unless they have the opportunity to obtain an equivalent degree of control by taking security over the shares in the project company. This would (in theory) enable the lenders to exercise rights of shareholders in the event of default and take over management of the project company assuming that the applicable law of the jurisdiction concerned confers a right of possession rather than judicial sale. The lenders will, however, need to be aware that, by assuming control through the project company's equity, in certain jurisdictions they risk taking on liabilities of the project company (e.g. in the UK by becoming shadow directors of the project company).

### 6.3 Universal Security Interests

It will be readily apparent from the above that jurisdictions in which universal security over all of a company's property and assets (whether through a floating charge or a similar instrument) with the ability to be able to appoint receivers to take control of the project assets is a significant advantage for lenders involved in the financing of projects. However, for the most part, these advantages are enjoyed mainly in the common law-based jurisdictions and so where lenders are financing projects in other jurisdictions they will frequently find they have to accept a less complete security package, which in some cases falls well short of giving either effective control over the project assets or acting as an effective defence against other creditors. In some jurisdictions it may be possible for the lenders to achieve some of these advantages through a pledge of the shares of the project company or other security devices, but the position will seldom be as effective or secure as a right to appoint a receiver.

English security law allows the taking of universal security, is extremely flexible and is generally thought to favour lenders. Some of the more important features of English security law from the point of view of a lender are as follows:

- It allows enforcement to be effected without involving the courts, and sale is not the only enforcement remedy, a secured lender can also operate an asset (either by taking possession of the asset himself or by appointing a receiver)
- Certain types of security (fixed security) will rank ahead of preferential creditors
- It allows security to be taken over virtually all types of assets, including security over assets which do not yet exist; this ability to be able to take security over future assets can be of fundamental importance in the context of project financing, especially in those projects where future receivables form an important part of the project security
- It allows security to be taken by means of a floating charge over all of a company's assets; thus, it is not necessary to create different types of security interests over different categories of assets, for the most part English law will not concern itself with the form of a security interest and will be more concerned with the scope and issues of priorities
- Security can be taken over virtually all classes of asset without taking possession of that asset (in other words, English law recognises non-possessory security interests)
- It allows security to be taken over all of a company's property, assets and business, through the use of the floating charge, without the need to separately identify and list all of such property and assets
- There is a central registration system for most categories of security interests which enables creditors and prospective lenders to check what security a company has already created in favour of other creditors
- It does not for the most part impose liabilities on the lenders as mere holders of the security (unless, for example, they have become shadow directors of the project company)
- Only minimal fees and duties are payable on the creation of security and only the normal transfer taxes (e.g. stamp duty) are payable on its enforcement.

## 6.4 Scope of Security

Over what assets will the lenders seek security? If the lenders are lending to a special purpose vehicle and a universal security interest (such as a fixed and floating charge) over all the property and assets of the project company is permissible, then this approach is likely to be the most effective. Where the project company is not a special purpose vehicle or in those jurisdictions where universal security is not recognised, then it will be necessary for the lenders and their advisers to identify those assets over which they require security (and, indeed, over which it is possible to take security). In many jurisdictions there will be different ways of taking security and different rules governing the taking of security over different classes of assets. For example, security over moveable goods (such as goods and chattels) may require one type of security interest being taken whereas security over intangible assets (such as receivables and other contract rights) may require a different approach. In most jurisdictions security over land and real property rights involves the most formal procedures of all.

The key project assets over which the lenders will require security will include:

### Concession Agreement/Licence (or Equivalent)

In a concession-based (or build-own-transfer) project this will usually be the key element of any security structure as it will be through this document that the project company (and therefore the lenders) acquire the rights to build, use and operate, as appropriate, the project. Without effective security over the concession agreement the value of security over any property or fixed plant and machinery is likely to be very limited. In some jurisdictions where security assignments are not recognised, if the lenders are to create an effective security package it will be crucial for the lenders and their advisers to attempt to construct equivalent contractual rights with the concession grantor and the project company. The end result may be to achieve substantially similar protection through a combination of a negative pledge, other covenants and a direct agreement with the concession grantor (see below), or alternatively, in some jurisdictions it may be possible to take an absolute assignment of the concession agreement subject to some form of conditionality (e.g. such as the occurrence of an event of default). Another issue that frequently arises in the case of enforcement of security over concession agreements is the identity of any assignee. In many cases local laws may prohibit foreign entities owning the concession in question. Even where this is not the case, it is likely that the concession grantor will reserve the right to approve any assignee which is likely in practice to seriously weaken the position of the lenders.

## Plant and Machinery

The extent and significance of plant and machinery will obviously vary from project to project. For example, in a power project there is likely to be a considerable amount of fixed plant and machinery and the lenders will want to ensure that they have effective security interests over these assets. However, the extent to which it is possible to obtain a nonpossessory security interest over chattels varies considerably according to the jurisdiction. In France, for example, a non-possessory pledge of machinery and equipment is possible (and is registerable); but only in favour of the person who loaned money to buy the equipment in the first place. Where plant and machinery has been supplied by third parties it may be that in certain jurisdictions title to these assets is retained in whole or in part by the suppliers (under so-called retention of title clauses). Such devices are likely to frustrate the aims of lenders in taking effective security over the assets in question.

## Real Property

If the project company owns the land on which the project is being built or operated then this should also form part of the lenders' security. In some BOT projects the real property is only leased to the project company and it will be a matter of local law whether it is possible to take security over the lease in question. In any event it will be important for the lenders to know that, on an enforcement of this security, they have the right to enter the project company's property and take control of the property.

## Construction Agreement

In an infrastructure project the construction agreement will be one of the key contracts during the construction period and as such will form an important part of the lenders' security. Quite apart from taking a security assignment over this agreement, the lenders are also likely to seek a direct agreement with the contractor (see section 6.6). Where there is no turnkey contractor, then the lenders are likely to have to take separate security interests over all of the construction related agreements (or at least the most important ones) together with security over the project management agreements. This can be a cumbersome and difficult procedure. Further, the non-turnkey approach in construction projects gives rise to the risk that disputes arise between the different contractors over the scope of their respective responsibilities and liabilities which is likely to cause delays and which could result in the project company being in default under other project documents. The result can be that significant gaps appear in the contract structure. It is for this reason that lenders prefer the turnkey model to project financing. (See sections 2.10 and 3.4 for a more detailed explanation of these and other construction related issues.)

## Performance Bonds/Parent Company Guarantee

If the contractor has been required to put up performance bonds from a bank or insurance company or a parent company guarantee in connection with the construction agreement, then the benefit of these will usually be assigned to the lenders. Such guarantees and bonds will usually be written by the contractor's lenders and are commonly 10 per cent to 20 per cent of the total contract price. The lenders will want to reserve for themselves both the right to call these bonds and the right to direct that proceeds under these bonds are paid direct to them. It will also usually be a requirement of the lenders that such bonds provided by banks or insurance companies are payable "on demand" and are not subject to proof of default or breach by the contractor.

## Other Project Agreements

The benefit of all other project agreements, including operating and maintenance agreements, offtake agreements, supply agreements, transportation agreements and tolling agreements should also be assigned by way of security to the lenders. In the case of the most important of these other agreements the lenders are also likely to require a direct agreement with the counterparty (see section 6.6). In a perfect world the lenders would aim to take security over all agreements entered into by the project company in connection with the project, but in some cases this may be too ambitious and the lenders may have to limit themselves to concentrating on the key project agreements. This is especially the case where universal security interests are not available. Further, in many jurisdictions it is necessary in order to perfect each security interest to serve notices of assignment on the counterparties to such contracts and undertake other formalities and this can prove cumbersome in those projects where there are a large number of project agreements.

## Project Insurances

In most projects, particularly infrastructure projects, insurance will be an important part of the lenders' overall security package. If a natural or other disaster occurs that, say, results in a total loss of the project or a key element of the project, then the only significant remaining asset that will be available to repay the lenders is likely to be proceeds of insurance taken out by the project company. The lenders, therefore, will want to be comfortable that the insurance cover will subsist at least for the life of their loans. They will also want to ensure that the policies are effectively assigned to them and that all proceeds are paid direct to them. Insurance in the context of project finance is a complete subject on its own and lenders will usually employ a firm of insurance advisers to provide specialist advice to them.

Lenders will also want to protect themselves against the risk that any insurance policy could be avoided by a non-disclosure on the part of the project company. If insurance companies are prepared to give a waiver, this issue can be dealt with by inserting a "non-vitiation" clause into the policy. Alternatively, it may be possible to obtain mortgagee protection insurance (insuring against the risk of vitiation itself). Recently, it has become difficult to obtain either form of protection from the insurance market and this is an area that can prove contentious for lenders.

Insurance issues in connection with project finance are discussed in greater detail in section 7.

## Bank Accounts

Most project financing structures will envisage the close control of all the project cash flows either through the facility agent, a security trustee or one of the other banks. In addition to ensuring that all project revenues flow through these accounts, the lenders will also want to ensure that they have a valid security interest over these accounts so that at all times they can effectively control withdrawals and the use of the project cash flows. In many non-common law jurisdictions the need to specify (with varying degrees of specificity) the identity of property being transferred means that granting security over a bank account is difficult. Further, in some civil law jurisdictions it is only possible to perfect security over bank accounts in those cases where the bank holding the security has control over the account (in the sense that it can refuse to permit withdrawals from the account). Frequently, therefore, the project loan documentation will require project revenues to be paid into a jurisdiction where effective security over bank accounts can be obtained (often London or New York). The ability of the project company to withdraw monies from these project accounts will be strictly monitored and regulated (see section 8.2 for a more detailed explanation of this issue).

## Product

Where the project produces products such as hydrocarbons or minerals, then wherever possible the lenders will seek to take security over these products. However, in many jurisdictions, title to hydrocarbons and minerals is vested in the Crown or Government until they are successfully extracted and, therefore, no security interest will be possible until the hydrocarbons have been extracted. For example, in the UK, North Sea oil in the ground does not belong to the oil companies but to the Crown. The oil companies are merely granted the right to extract that oil and upon extraction the oil belongs to the oil companies.

Also, there may be further complications in certain jurisdictions where products are mixed with the same product belonging to others. An example of this would be where oil or gas is transported through a common transportation system making it impossible to identify individual ownership interests. In such cases, the best that the lenders can probably hope for is the right to take delivery of an agreed share of the products once they exit the common transportation system.

## Other Project Assets

Other relevant project assets will include all consents and permits, intellectual property rights (especially important in certain information technology projects), investments and rights under other contracts (e.g. claims in damages). If a hedging programme has been set up for the project, then the lenders will want to ensure that the benefit of this programme falls within the overall security package. Where universal security is not available, however, there can often be problems in identifying at the outset the extent of such other assets and which ones may be valuable. Extensive due diligence may be required to satisfy the lenders that there are no significant gaps in their security.

## 6.5 Third-Party Security

So far we have looked at security provided by the project company itself. However, in many projects security and/or guarantees and/or support will be provided by third parties. Most commonly, this third-party security will come from the shareholders of the project company and the project's sponsors, but often other parties having a significant involvement or interest in the project may be called upon to provide guarantees or other support. The following types of third-party support are frequently encountered in project financings.

### Shares in a Special Purpose Vehicle

As mentioned above, security over shares in the project company can be especially valuable for project lenders where there are gaps in the security package given by the project company or where the local security laws do not allow for a comprehensive and effective security package to be taken. If the lenders have security over the project company's shares, then this will give them the option, at least, to sell the project company in its entirety rather than going through the, perhaps, painful and expensive route of security enforcement. Another added advantage of security over a project company's shares is that the lenders may be able to secure for themselves the right to remove directors of the project company and appoint substitutes (although as mentioned above this may not always be possible, depending upon the jurisdiction concerned). In this way, the lenders may in certain circumstances take a golden share (or equivalent) which would give them the right to appoint a special director who, in certain circumstances, would have veto and other rights and would be answerable to the lenders. Again, this can be a useful way of exercising control rights over a project where these cannot otherwise be achieved through the conventional security package.

However, in certain jurisdictions it may not be possible for the lenders (as foreign persons) to have security over the shares of a local company, particularly in the case of projects in the public domain or in strategically important industries. It may be possible in these circumstances to circumvent such restrictions by ensuring that security over these shares is taken by a local bank who holds the security on trust for the lenders.

### Completion Guarantees

In the absence of a turnkey (or equivalent) construction contract with a construction company of suitable credit standing which provides for an acceptable level of liquidated damages in the event of delayed completion, the lenders may not be prepared to assume construction/completion risk on a project and they may seek a guarantee from the shareholders/sponsors to the effect that the project will achieve completion by a stated date. A definition of completion will need to be agreed and it will usually be a requirement of the lenders that completion is verified by an independent engineer acting for the lenders. A completion test will usually incorporate three general criteria:

- Confirmation that the project is physically complete so that it can be put to use
- Demonstration that the project meets the required performance criteria and
- Demonstration that the project can be expected to operate reliably as represented by the project company over the term of the loan.

As a completion guarantee from the shareholders/sponsors will necessarily involve the lenders in taking a credit risk on the shareholders/sponsors, the lenders will be concerned as to the credit standing of the completion guarantor and will need to be satisfied that it is of sufficient financial standing so as to be able to meet its maximum potential liabilities under the guarantee (which may be very significant should the project run into serious difficulties). Accordingly, one might expect to see extensive covenants and warranties requested from the completion guarantor. Should the completion guarantor lack the necessary financial standing, then it may be that the lenders will demand back-up support, either in terms of a counter guarantee from another group company or perhaps even a letter of credit or guarantee from its bankers. One significant problem with completion guarantees (and similar instruments) is that, under common law principles, the principal remedy for breach lies in damages for breach of contract. This is significantly weaker than, say, a financial guarantee, as the lenders will not only have to prove causation and that their loss was reasonably foreseeable, but will also be required to mitigate their loss. (See section 1.3 for a more detailed explanation of this issue.)

## Cost Overrun Guarantee

This is a close relative of the completion guarantee and often goes hand in hand with a completion guarantee. As its title suggests, it is a commitment by a third party that should the costs of achieving completion of the project exceed the agreed project budget, then the cost overrun guarantor will meet the shortfall. Sometimes the cost overrun guarantor is required to meet cost overruns as and when they occur (that is measured against the ongoing project budget) whereas in other cases it is only required to pay up once loan funds have been exhausted. In either case, the lenders are again taking a credit risk on the cost overrun guarantor and therefore the same considerations that applied to the completion guarantor also apply to the cost overrun guarantor. Sponsors will often try to limit their obligations to covering cost overruns and then up to an agreed maximum as this is a more limited degree of support than entering into a full-blown completion guarantee where it is almost impossible to quantify the potential maximum liability. Whether or not the lenders are prepared to accept this reduced degree of support in any particular case will depend on a number of factors, not least the availability of technical assistance and experienced personnel to enable the project company to achieve completion.

## Management Agreements

These are agreements that provide for the project company to have available to it the necessary technical assistance, employees and management to embark on and complete the project. Usually these services will be provided by one or more of the sponsors. Lenders will usually want the commitment to provide these services clearly defined so that should problems arise the lenders will be able to look to the responsible party. Further, the lenders would expect to have an assignment of the benefit of any management agreement enabling them to sue the sponsors directly should the sponsors not fulfil this contractual commitment to the project company.

## Equity Contribution Agreements

These are agreements entered into by the shareholders or sponsors of the project company under which they commit, in certain circumstances or alternatively at specified times (with the agreement of the lenders), to inject further equity into a project company. Lenders will not always insist that shareholders or sponsors subscribe for all their equity at the outset of the project, but may, depending on the credit standing of the shareholder or sponsors, permit shareholders or sponsors to make equity injections during the construction period. One of the problems with such agreements is that if the project company is wound up before a call is made on a shareholder or sponsor, then clearly a shareholder or sponsor cannot subscribe for further shares in the project company. Ideally, therefore, they should be contracts entered into by the shareholders or sponsors directly with the lenders (or their agent) and contain a direct covenant to pay (or, perhaps, guarantee) in favour of the lenders (or their agent). This will not, however, always be acceptable to the shareholders or sponsors.

These agreements are sometimes referred to as cash deficiency agreements and may give the shareholder or sponsor the option of subscribing for further equity or making loans to the project company. If the shareholder or sponsor is to be permitted to make loans to the project company, then these must be fully subordinated to the project loans and (preferably) unsecured. It would usually be the case that no interest would be payable on these loans until the project loans have been repaid in full or, perhaps, in circumstances where the project is meeting minimum cover ratios.

## Collateral Warranties

These are agreements entered into between the lenders and key individuals or firms providing advice and services to the project company. Most typically, these will be obtained from professional firms of architects, surveyors and engineers retained by the project company to advise it in connection with the project. The purpose of collateral warranties is to extend the duty of care which the professional firm owes to the project company to the lenders. Without this the lenders may not have an enforceable right of recovery against the professional to cover losses sustained by the lenders through the acts or omissions of the professional. They are, in effect, intended to confer the right for the lenders to sue the professionals directly. A related point for lenders to note in connection with collateral warranties is the right for lenders to be able to assign these collateral warranties in connection with any subsequent sale by the lenders following an enforcement since subsequent purchasers will want to have the benefit of these rights against the professionals.

If these collateral warranties can be obtained from the professional team, then the lenders will usually go one step further and demand that they are made aware of the professional negligence insurance taken out by the professionals which will have to be at a level acceptable to the lenders and maintained at that acceptable level (but obviously subject to availability).

Collateral warranties are not always sought by lenders, frequently due to the difficulty of obtaining these from professionals. Many professional bodies have now produced their own standard form letters and negotiating against these forms can be difficult and not very rewarding as the professionals have in many cases settled their respective forms with their insurers and, therefore, are most reluctant to change them. Faced with such difficulties, and where the lenders are taking security over all the project company's assets (including, therefore, rights to sue third parties), some lenders will seek to rely instead on inheriting rights of the project company against the professionals on an enforcement of the security.

## 6.6 Direct Agreements

Direct agreements are a particularly important feature of those projects (most) where the project company enters into important commercial agreements with third parties and, in practice, that means most projects. Their purpose is to protect the lenders against the loss of their investment if the project company defaults under one of the key contracts it has entered into (typically the concession agreement, main construction contract, long-term supply contract and any long-term off-take contract) and as a result termination of that contract is threatened. They are a relatively recent development although the idea behind requiring third parties that have contractual relations with the project company to give undertakings direct to the lenders is nothing new. In the early oil and gas financings in the North Sea during the 1970s it was quite common to seek certain assurances from the other joint venture parties in any particular licence area. The way in which these agreements developed is that, as part of the process of perfecting their security interest over the joint operating agreement amongst the participants in a particular licence area, the lenders would serve notice on either the operator of the field or each of the joint venturers notifying them of their security interest and asking the operator to notify the lenders of any defaults etc., before exercising any rights they may have to forfeit all or part of the interest of a defaulting participant.

As projects became more complex lenders and their advisers have focused more and more on the contractual relations between the project company and other third parties particularly in those jurisdictions where it is not possible to take effective security over the whole of the project company's assets or where the lenders did not have the right to appoint a receiver over the project assets. These agreements have now almost taken on a life of their own and can be extremely complicated and difficult to negotiate. Typically, they will cover the following key points:

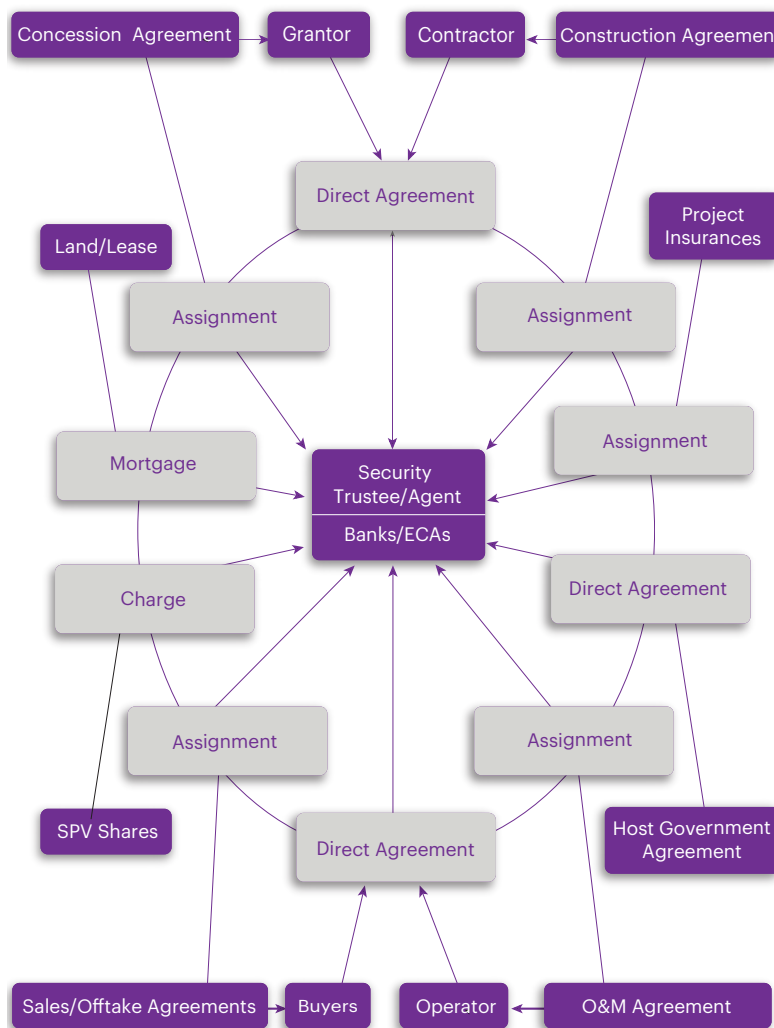
- Notice will be given to the third party of the lenders' security and, where required, consent given to the security by the third party
- The third party will be required to notify the lenders (or their agent) of any default by the project company under the relevant project agreement
- Upon such a default the third party will be required to suspend any right it has to terminate the project agreement for a minimum period of, say, 28 days (suspension period)
- During this suspension period the lenders would have the right either to cure the default in question or to take over the rights of the project company by "stepping in" to the project contract; frequently lenders will seek to place a maximum ceiling on their liabilities under the project contract
- As an alternative to stepping in themselves, most direct agreements will afford the lenders the option of stepping in through another vehicle, often a lender-controlled company. (The reason being that the lenders would prefer to distance themselves from a direct contractual relationship with the third party.) However, it is likely that the third party would require the lenders to guarantee the step-in vehicle's liabilities under the project contract
- The lenders would then be given the right to step out at any time should they not want to continue with their involvement in the project contract; subject to performing all their obligations under the project contract during the step-in period, after the lenders have stepped out they would not incur any new liabilities in respect of the project contract
- The lenders would also be given a further right of step-in upon the occurrence of a project loan agreement event of default independently of the third party's rights to terminate the project contract (this is often referred to as the "acceleration step-in")

- The third party would be asked to agree to waive rights of set-off or counterclaim against the project company that are not directly related to the project agreement in question
- In addition, other protections such as covenants not to amend the project contract and, where appropriate, make payments of any sums due to the project company direct to the lenders or their agent would be included where appropriate

One can see from the scope of these undertakings sought from third parties that they can impose not insignificant obligations and liabilities on the third parties and direct agreements can frequently consume a disproportionate amount of time and effort during the negotiation of the project loan documentation. This is particularly the case where the third party and the project contract in question are only a small part of the overall contractual framework for a project. Many third parties are extremely reluctant to expose themselves to obligations of this type towards the lenders. One way of overcoming this which is becoming more of an accepted practice, particularly in projects where there is a tender process, is for the requirement for a direct agreement to be made a part of the tender documentation and perhaps even for a form of agreement to be included in the tender documentation. This way the project company has the comfort of knowing that the successful tenderer has committed itself to entering into the direct agreement required by its lenders.

Direct agreements can be extremely useful security tools in those jurisdictions where it is not possible to take effective security over all the project’s assets.

Principal Security for a BOT project Fig. 15



## 6.7 Host Government Support

In some projects, particularly those in developing countries, lenders will often seek an additional layer of comfort from the host government. This may be part of the desire on the part of the lenders to reduce the political risk associated with the project or it may be a desire on their part to secure particular contractual commitments in relation to certain aspects of the project. Many host governments will object to having to enter into contractual commitments with lenders (particularly foreign lenders) providing finance for a project, particularly where one of the desires of the host government is to pass responsibility for the financing and implementation of the project on to the private sector. Whether or not the lenders in a given project are able to obtain such support from the host government will depend on the relative bargaining strengths of the parties involved and to a large extent on whether similar projects have been successfully completed in the host country. For example, in the early days of North Sea oil and gas financings certain undertakings were sought and obtained from the UK Government with a view to assuring the private sector that the Government would not exercise its powers arbitrarily or in a manner which could prejudice the financing arrangements. Over the years as lenders have become more comfortable with the technology and risks associated with financing such projects in the North Sea, the UK Government has substantially cut back on the scope of this support.

Where this support is obtained, it may extend to the following:

- Agreement that there will be no change of law that will have a material adverse affect on the project (for example the introduction of new laws which require changes to the specifications of the project). This is the non-discrimination principle
- A guarantee of the availability of foreign exchange to the project company in order to enable it to service its debt to the project lenders. This will be important where the project's income is in the local currency and the project debt is in another currency
- No expropriation/nationalisation without full compensation (including, at a minimum, the repayment of the project loans and related costs)
- Undertakings as to levels of taxation applicable to the project company and the project; again, the lenders are seeking a principle of non-discrimination
- Undertakings concerning non-imposition (or exclusion from) exchange controls
- Guarantees that all consents and permits will be granted to the project company in order to enable it to complete and operate the project (subject, of course, to the project company complying with its obligations under the concession agreement or other appropriate agreement).

Often the most sensitive area is taxation where most governments will object strenuously to having their hands tied as to future taxation policies. Similarly, governments do not as a rule like to be told that they cannot change laws. One compromise that is often acceptable is that the host government will agree to such constraints on its powers on a non-discriminatory basis, i.e. it will not, in exercising its taxation or legislative powers, discriminate against the project and/or the project company on an individual basis.

## 6.8 Comfort Letters

Strictly speaking a comfort letter is a letter acknowledging a moral but not a legally enforceable obligation. However, there is no standard text for a comfort letter and at one end of the spectrum they confer no legally enforceable rights whereas at the other end of the spectrum they can confer legally enforceable rights.

Comfort letters generally arise in a project financing when lenders or other project participants wish to obtain a guarantee or other legally binding commitment from either a host government or the shareholder(s) of the project company or any of the other project parties but are unable to obtain this. There may be any number of reasons why a host government or shareholder will not want to give a guarantee or other legally binding commitment. For example they may be restricted by banking covenants in other loan documentation, or they may need to obtain exchange control or other government consents, or they may be restricted by the terms of their statutes from giving such guarantee or other legally binding commitments, or they may wish to keep the guarantee or other legally binding commitments off their balance sheet, or they may simply not be prepared for sound commercial reasons to give a legally binding commitment of the type requested.

If the lenders are unsuccessful in persuading the project party to issue a guarantee or other legally binding

commitment, then they may succeed with a comfort letter. As noted above, there are, essentially, two types of comfort letter. The first type of comfort letter will be phrased in fairly clear and unambiguous terms and will contain obligations that are enforceable in the courts. For example, and assuming that the essential elements of the formation of contracts exist (such as consideration and an intention to create legal relations), the following are obligations that are capable of being enforced:

- “so long as the project company is indebted to you under the project loan agreement we will not sell or dispose of or create any encumbrance over, any of our shares in the project company”
- “it is our policy to ensure that [the project company] and our other subsidiaries are at all times in a position to meet their [financial] obligations”.

If, however, the second obligation had been phrased in terms of “... it is our current policy to ensure...” then the position would be quite different and, indeed, the English Court of Appeal in *Kleinwort Benson Limited v. Malaysian Mining Corporation* [1987] BHD held that, although the comfort letter in question (which was in these terms) evidenced an intention to create contractual relations, the content of the comfort letter (and in particular the statement as to current policy) did not amount to a promise as to future conduct. This case clearly illustrates that the parties wishing to rely on comfort letters in legal proceedings are faced with two hurdles, namely (1) to prove that there is a contractual intention, and (2) to prove that the nature of the promise in the comfort letter is such that it can give grounds for a breach. The bank in the *Kleinwort Benson* case fell at the second hurdle as the court found that the terms of the letter were merely a statement of present fact and were not sufficient to amount to a promise regarding future conduct.

Whilst the *Kleinwort Benson* case represents the current position on comfort letters under English law, it is not necessarily the case that this line of reasoning would be followed in other jurisdictions. For example, the Australian courts have criticised the decision of the Court of Appeal in this case and have suggested that it is inappropriate in the context of a comfort letter to subject it to minute textual analysis. Instead, it is suggested that more attention is paid to the circumstances surrounding the giving of the letter of comfort. Other jurisdictions may take a similar approach to the interpretation of comfort letters.

One of the problems with comfort letters is that, due to the essentially concessionary nature of a comfort letter, it often quite deliberately contains unclear or ambiguous wording in an attempt to keep both parties happy. This can, and frequently does, lead to problems later on when the events occur that cause the bank or other project party to seek to rely on the statements given in the comfort letter. Many comfort letters end up being a mixture of obligations, some of which are clearly unenforceable and some of which may be enforceable. Inevitably, there is a dilemma for the parties in agreeing the terms of a comfort letter. If the terms are too precise and clear then they run the risk of giving rise to the same problems that the rejected guarantee gave rise to. If, on the other hand, the terms are ambiguous and unclear, then they almost certainly will only constitute a moral obligation at best. What is clear, however, is that both parties should take legal advice to ensure that they understand the legal implications in the relevant jurisdiction of the terms of the comfort letter.

## 6.9 Governing Law

As has been noted earlier, the issue of which governing law should govern a particular project agreement can be a controversial issue. Lenders, understandably, prefer to see an independent law, such as English or New York, applied to project agreements (especially loan documents) not only because of the neutrality issue, but also because it is felt that these legal systems are better equipped to deal with disputes concerning sophisticated project structures and documentation.

However, although in many jurisdictions parties are free to choose the law that is to govern a particular contract, in the case of security documents it is crucial that the security interest in question over the project assets is properly and effectively documented according to the project asset’s “governing law”. In very broad terms, an asset’s “governing law” is as follows:

- Land and buildings: country in which they are located
- Registered assets (e.g. registered vessels, shares, patents): country of registration
- Physical chattels: country where physically located on date of mortgage
- Benefit of a contract, including receivables: Governing law of contract receivables.

## 6.10 Security Trusts

It is now common in large-scale project financings to see arrangements where the security is held by, and project revenues paid to accounts in the name of, a security trustee. Security trusts represent a convenient way of taking and holding security in those jurisdictions where the concept of a trust is recognised. Two particular advantages of security trusts are firstly, that they facilitate the trading of loans by the lenders without any danger of releasing security and, secondly, that they remove the insolvency risk of an agent or other third party holding the security. In those jurisdictions where trusts are not recognised it may still be possible for one of the banks to act as security agent on behalf of the other lenders, although the insolvency of the security agent becomes a risk for the lenders. Failing this, it will be necessary for all the individual lenders to be a party to each of the security documents which is both cumbersome and inflexible, especially as this would inhibit the trading of debt by the lenders.

## 6.11 Formalities

Whatever security is taken it will need to satisfy the security formalities in the relevant jurisdiction. The relevant jurisdiction may require registrations, filings, translations, notarisations, the payment of stamp duties and other formalities depending upon the jurisdiction in question. Local law considerations will have to be investigated by the lenders' lawyers at the outset so as to ensure that the security package finally agreed upon is both properly constituted (not least that the project company has the power to grant the security being taken) and perfected in accordance with local laws. Such formalities may be relevant both at the time the security is taken and at the time of enforcement. Failure to comply with these formalities will, in many jurisdictions, result in the security being unenforceable.

## 6.12 Problem Areas

In many jurisdictions around the world lenders will encounter difficulties in structuring an effective overall security package for a project financing. These difficulties are usually as a result of the local security laws that either do not recognise the type of security that the lenders are trying to create or, where a particular type of security is possible, local procedural rules frustrate or obstruct the perfection or enforcement of such security. Some of the problem areas are:

- Certain jurisdictions impose a total block on creditors enforcing their security during bankruptcy proceedings (e.g. UK administration procedure and US Chapter 11 procedure)
- Certain jurisdictions do not recognise the concept of trusts with the result that security trusts are unlikely to work (many civil law jurisdictions)
- Certain jurisdictions do not recognise security contract assignments (many civil law jurisdictions)
- Certain jurisdictions require that any sale of security assets must take place through a judicial auction procedure
- Certain jurisdictions are problematical for certain types of loans, e.g., revolving loans or foreign currency loans
- Certain jurisdictions give preference to certain categories of creditors (most common law jurisdictions).

Faced with such difficulties the lenders will either have to accept a tainted security package or seek comfort from third parties (usually the sponsors!).

# Section 7

## Insurance Issues

### 7.1 Role of Project Insurances

Insurance is a very important aspect of most projects and certainly one that will concern the project sponsors and the lenders equally. From the perspective of the lenders, they will view the insurances as an integral and key element of their overall security package for a project. Should a major casualty or disaster occur with respect to all or a material part of the project, then the lenders may be left with little else to proceed against! It is, therefore, perhaps surprising that in many project financings the subject of insurances is often deferred until the last minute and then not always given the attention it warrants.

### 7.2 Who Insures?

One of the first issues to resolve is which party will be responsible for arranging and maintaining the insurances for the project during the various stages of the project. The responsibility for this will vary from project to project. For example, in a construction-related project the principal insurance cover during the construction period will often be arranged by the contractor through a Contractor's All Risks policy, with the responsibility for maintaining insurances during the operating period then moving to the project company or, perhaps, the operator of the facility. Some sponsors prefer to leave insurance arrangements to individual project companies to arrange on a project-by-project basis. Others prefer to centralise all insurance arrangements. This is the case, especially with some of the larger international contractors which do this to ensure that they get the finest rates for their cover, and also as a means of effectively managing their risks more thoroughly and efficiently.

### 7.3 Scope of Cover

Cover will vary between the construction and operating phases of a project. Details of typical insurance cover applicable to each of these phases is set out in Fig. 16.

Additional insurance may, depending on the precise nature of the project, be required. For example, in projects connected with the development of oil, insurance against the cost of controlling a blow-out might be required.

### 7.4 Problem Areas

It is almost certainly impossible to list all the potential problems that could arise with the insurance aspects of a project, but some of the principal concerns from a lender's perspective might be the following:

- The policy may be cancelled, either in accordance with its terms, by agreement between the insured and the insurers, or by the brokers for non-payment of premiums
- The policy may expire and not be renewed
- The policy may be changed in a way that will adversely affect the cover provided, e.g. the scope of the policy may be narrowed, policy limits may be reduced or deductibles may be increased. Deductibles are, of course, a form of self-insurance
- The loss may be caused by a peril which was not insured; therefore, a policy which covers political risks such as war, revolution and insurrection should be checked further to ensure that it also covers politically motivated violent acts such as terrorism or sabotage
- The policy may be voided by the insurers, on grounds of misrepresentation or non-disclosure. Insurers, in deciding whether to accept the risk, rely on the information presented to them by the insured (or their representatives). Lawyers acting for the insurers may well elect one of these grounds so that the claim need not be paid. The contract of insurance is a contract said to be of "uberrimae fidae" (of the "utmost good faith") and so can be disclaimed for seemingly minor non-disclosure or misrepresentation. Understandably, this type of clause has been strongly resisted by the banking community, which could be faced with the principal cover falling away as the basis of a non-disclosure or misrepresentation of which they were completely ignorant. In the past many insurers were prepared to waive these clauses following pressure from the banking community but recently the position of the insurance industry has hardened. Faced with this, one way of some comfort to the lenders in these circumstances is to follow the co-insured route (see below). Another is to take out additional

cover to protect the lenders against invalidity of a policy on grounds of non-disclosure or misrepresentation (so-called non-vitiating cover). Such policies are a relatively new entrant to the insurance world but should not necessarily be viewed as the complete solution. In the first place such cover is expensive (7.5 per cent to 15 per cent of the sum insured) and, more importantly, insurers will only pay out in circumstances where the only reason why the insurers have not paid out on the main policy is as a result of a non-disclosure by the project company or other insured party. In other words, they are not a general cure for all defences that an insurer may have and, if an insurer is otherwise entitled not to pay or only to part pay, the non-vitiating insurance will not protect the lenders

- The policy may be voided by the insurers, on the grounds of breach of warranty by the insured
- The insured may not make any (or any timely) claim for indemnity under the policy
- The insurers may be insolvent and unable to pay a claim
- The claim may be paid by the insurers to the brokers but somehow lost in the brokers' insolvency
- The broker may assert a lien (i.e. a special, proprietary claim) against any unpaid premiums which are due from the insured
- A claim may be paid to the insured by the brokers but somehow lost in the borrower's insolvency.

The occurrence of any or a combination of these events could result in the insurance monies not being received by the lenders, as expected, with the result that the lenders could find themselves unsecured for all or part of the project loan.

## Project Insurances

### Fig. 16

#### Construction phase

- Physical damage to project facilities during the course of construction
- Physical damage to other assets such as offices, vehicles, etc
- Transit insurance, e.g. parts in transit
- Employers, workmen's compensation and third-party liability insurance (as below)
- Environmental liability insurance
- Delay in start-up insurance against increased costs resulting from delay caused by an insured loss.

#### Operating phase

- Insurance against physical damage to project facilities
- Insurance against physical damage to other assets such as plant, equipment, motor vehicles
- Transit insurance covering the period until point of sale
- Employers, workmen's compensation and third-party liability insurance
- Environmental liability insurance
- Business interruption or loss of profits insurance.

## 7.5 Protection for Lenders

In order to cover themselves effectively against as many of the risks mentioned in section 7.4 as possible, the lenders will look to take the following action:

### Insurance Advisers

In most large projects the lenders will appoint a firm of internationally recognised insurance brokers to act for them in providing specialist advice on the scope and level of insurances applicable for the project. A detailed insurances memorandum will be entered into between the lenders and the project company (or whoever is responsible for undertaking the insurances for the project) which will spell out the minimum insurance obligations at all stages of the project.

## Security Assignment

As part of the security package, the lenders would expect to receive an assignment by way of security of all the rights, title and interest of the borrower in all project insurances, or, where the insurances are arranged by the contractor or another party, then a security assignment from this party. Notice of this assignment will be given to the insurers in the usual manner.

## Loss Payable Clauses

A "loss payable" clause will be endorsed in to each of the policies. This clause will stipulate that the proceeds of any claim (usually above a certain minimum threshold) are to be paid to (or to the order of) the lenders. Because of the uncertainty as to the exact legal characterisation of loss payable clauses they are rarely relied upon without a formal security assignment.

## Co-insurance

It is possible under English law to insure in the names of both the project company and the lenders or alternatively to note the lenders as co-assured on the policy. This has the advantage that protection for some of the previously mentioned risks falls away. For example, if there has been a breach of warranty by the project company, it is unlikely that the lenders will be aware of such breach. In these circumstances the insurers should have no grounds to resist a lender's claim in these circumstances. Because the lenders' insurable interest is expressed as a separate interest to that of the project company, it is thought that under English common law principles a policy should not be tainted with any non-disclosure or misrepresentation by the project company with respect to the policy. However, where so much may turn on the policy validity, most lenders are reluctant to rely on simply the common law, since it could always be argued that where only one party arranges the insurances that party is in effect acting as agent for the other party and that, accordingly, each party is affected by non-disclosure or misrepresentation. It is therefore safer to combine a co-insurance provision with an express endorsement on the policy whereby the insurer acknowledges that non-disclosure or misrepresentation by one party should not affect the other.

### 7.6 Broker's Undertaking

This is an undertaking delivered by the broker (of the project company) to the lenders regarding the insurances and forms an essential part of the overall security package for lenders. The terms are a matter of negotiation between the broker and the lenders; however, standard forms have been produced for these undertakings in the market. Typically, the following undertakings would be asked of the brokers:

- To have endorsed on each and every insurance policy agreed endorsements together with a copy of the notice(s) of assignment to the insurer signed by an authorised signatory of the project company and acknowledged by the insurers
- To pay to the facility agent without any set-off or deduction of any kind for any reason any and all proceeds from the insurances received by them from the insurers (except as might be otherwise permitted in the relevant loss payable and notice of cancellation clauses)
- To advise the facility agent:
  - (a) at least 30 days (or such lesser period, if any, as may be specified from time to time in the case of war risks and kindred perils) before (1) cancellation of any of the insurances is to take effect and (2) any alteration to termination or expiry of any of the insurances is to take effect
  - (b) of any default in the payment of any premium for any of the insurances prior to any cancellation or lapse of cover which may then arise
  - (c) at least 30 days prior to the expiry of the insurances if they have not received renewal instructions from the project company and/or any jointly insured parties or the agents of any such party, and, if they receive instructions to renew, to advise the facility agent as soon as reasonably practicable of the details thereof
  - (d) of any act or omission or of any event of which they have knowledge and which might invalidate or render unenforceable in whole or in part any of the insurances as soon as reasonably practicable on becoming aware of the same
- To disclose to the insurers any fact, change of circumstance or occurrence material to the risks insured against under the insurance promptly upon becoming aware of such fact, change of circumstance or occurrence

- To treat as confidential all information marked as or otherwise stated to be confidential and supplied to them by any person for the purposes of disclosure to the insurers under the insurances and not to disclose, without the written consent of that person, such information to any third party other than the insurers under the insurances in satisfaction of their undertaking in the previous paragraph
- To hold the insurance slips or contracts, the policies and any renewals thereof or any new or substitute policies (in the case of new or substitute policies, issued only with the facility agent's consent), to the order of the facility agent
- To notify the facility agent at least 30 days or such lesser period as shall be practicable prior to ceasing to act as brokers to the project company or, if impracticable, promptly following their ceasing so to act
- To use all reasonable endeavours to ensure that, if any of the insurances are on a claims made basis, such policies of such insurances are endorsed to provide cover for at least eight years after the expiry or cancellation of such policies or that alternative arrangements are made in order to achieve an equivalent result.

## 7.7 Reinsurance

It is often the case that all or a significant part of an insurance policy is reinsured with other insurers. Usually this is simply because the principal insurer does not have the capacity to absorb the full risk insured against. It is also the case that some jurisdictions have a legal requirement that all or a part of the insurances is insured through domestic insurers. With many of the larger projects this will frequently pose a problem for the local insurers who will not be able to underwrite the full amount required. Also, the lenders may have a concern with all the insurances being placed locally as this exposes them potentially to additional risks that the payment of insurance claims may be blocked or otherwise interfered with (i.e. a form of political risk).

Reinsurance with offshore insurers is therefore frequently called for by both lenders and local insurers. However, there is a serious security issue for lenders to consider with reinsurance. The issue concerns the possible insolvency of the principal insurer. Since the contract of reinsurance will have been taken out by the principal insurer with the reinsurance company, should the principal insurer become insolvent, all proceeds payable under a reinsurance contract will be paid to the estate of the principal insurer and distributed to its creditors according to the normal bankruptcy laws in its jurisdiction of incorporation. In other words, neither the project company nor the lenders are likely to have any priority interest in these insurance monies since they form part of the insurer's bankruptcy estate.

There are two possible ways of dealing with this issue:

- The most satisfactory route is to require the principal insurer to execute an assignment of the reinsurance proceeds in favour of the project company thereby removing the reinsurance proceeds from the principal insurer's bankruptcy estate. Notice of assignment would be served on the reinsurer in the normal way and the reinsurance proceeds would be paid direct to the project company (or, more likely, the security trustee). Although this is the best protection for the project company and the lenders, it is relatively rare that an insurance company can be persuaded to create a security assignment in these terms
- The alternative, and less satisfactory approach, is to arrange for the reinsurance contract to have endorsed on it a "cut-through" undertaking. The effect of this undertaking is that the reinsurer would be irrevocably directed by the principal insurer to pay the proceeds of all claims direct to the project company (or, more likely, the security trustee) thereby passing by (or cutting through) the principal insurer. The problem with this approach, however, is that it is doubtful that such an undertaking would be enforceable against a liquidator of the principal insurer as it does not amount to a security interest but is simply an unsecured payment direction.

# Section 8

## The Project Loan Agreement

In most project financings the loan agreement is likely to be the key financing document. Almost certainly structured on a syndicated basis, there will be a number of key points for discussion between the parties. The following are points that are likely to arise in most project financings and will be important issues for both the lenders and the project company.

### 8.1 Warranties, Covenants and Events of Default

In a project financing the scope of the warranties, covenants and events of default will be expanded to cover the project, the project agreements, the security agreements and (usually) other major project parties. Although it has already been noted that the remedies available to the lenders following a default may well be limited, the usual approach is for the lenders to demand extensive protection through warranties, covenants and events of default. This is more to do with a desire to be able to control matters should defaults occur than a desire to be able to accelerate and enforce their security for a seemingly minor default. That said, there is always a danger that if the warranties, covenants and events of default are too tightly drawn, minor delays or hiccups in the project can trigger a default which may necessitate syndicate meetings, waivers and unnecessary (and expensive) aggravation to all concerned. There is a balance, therefore, to be struck between on the one hand giving the lenders a sufficient comfort level so that, should things start to go seriously amiss with the project, they have the tools to take control (or at least to start issuing orders) whilst on the other hand avoiding the occurrence of default for minor and insignificant hiccups. An example of typical covenants and events of default for an infrastructure project is set out in Fig. 17.

There is a very important point to bear in mind when drafting warranties, covenants and events of default which relates to the recourse to the project company. It has already been noted that in most project financings recourse will be limited to the project assets and its cash flows. Where the project company is not a single purpose vehicle and therefore has other assets over and above the relevant project or where the shareholders/sponsors have agreed to procure performance of the project company's covenants under the project loan agreement (except for the obligation to make payments of the project loan), it will be crucial for the project company and the shareholders/sponsors whether an event or circumstance is treated as a warranty, as a covenant or as an event of default. The reason is that, whilst the lenders will usually agree to limit their recourse on an enforcement to the project assets and its cash flows, they will usually not forgo any other remedies (such as a claim in damages) that they may have in law against the project company and/or the shareholders/sponsors for breach of warranties and/or covenants.

This, therefore, provides the lenders with a potential damages claim against the project company and/or the shareholders/sponsors although, as has been noted above (see section 1.3) a damages claim is not the same as a claim for a recovery of a debt. Nevertheless, it is a valuable right and one which many lenders will not want to give up. On the other hand, the mere occurrence of an event of default is simply a trigger entitling the lenders to accelerate the project loan and enforce their security. It does not entitle the lenders to a damages claim.

Borrowers and shareholders/sponsors will therefore prefer events to be treated as events of default whereas lenders will prefer to characterise events as warranties and/or covenants.

An illustration of this point will help. In a concession-based financing one would expect to see a warranty in the project loan agreement at the outset stating that the concession is in full force and effect. However, one would not expect to see this repeated as the termination of the concession may well be something that is beyond the control of the project company. The project company will not want to warrant something over which it potentially has no control. On the other hand, however, the lenders will require a covenant that the project company performs its obligations in accordance with the terms of the concession and does nothing itself to precipitate a termination of the concession. This is perfectly reasonable from the point of view of the lenders since these are events within the control of the project company. Finally, the lenders will expect there to be an event of default should the concession be terminated for any reason. Structured in this manner, the borrower will be satisfied that a potential damages claim against it will only arise in circumstances where it has breached an obligation and the lenders will be protected in any event should the concession be terminated. Essentially, the distinction is one of fault versus no

fault. If the event or circumstance is the fault of the project company, then the lenders will expect protection through warranties and covenants. If, on the other hand, an event or circumstance is not the direct fault of the project company (e.g. expropriation or nationalisation of its assets or termination of the concession other than as a consequence of a breach by the project company), then the project company would not expect there to be any recourse against its non-project assets although, of course, the lenders will need to have the right to accelerate the project loan in these circumstances.

## Project Undertakings and Events of Default

Fig. 17

### Undertakings

Usual for this type of financing, but including:

- To carry out the Project in accordance with good industry practice
- To comply with all of the provisions of the Project Documents
- Not to amend or waive any provision of the Project Documents without the Majority Banks' consent
- Not to exercise certain specified discretions in the Project Documents without the consent of the Majority Banks and to exercise certain specified discretions in the Project Documents if the Majority Banks so require
- Not to enter into any new material agreement without the Majority Banks' consent
- Not to agree to the issue of the Takeover/Acceptance Certificate under the Construction Contract without the consent of the Independent Engineers
- To use best endeavours to ensure that the Project Completion Date occurs as soon as possible and in any event by [ ]
- Negative pledge
- Non-disposal of assets
- No other borrowings or lendings
- Not to make any distributions/dividends
- Take out agreed insurances with insurers and on terms acceptable to the Insurance Adviser
- Comply with all applicable laws (including environmental laws)
- Provide the Independent Engineer with access to the Project Facilities.

### Events of Default

Usual for this type of financing, but including:

- Failure to pay any amount due under any Finance Document
- Failure to comply with any other undertaking under any Finance Document or Project Document
- Breach of any representation and warranty contained in any Finance Document
- Remaining Development Costs exceed Available Funding
- Loan Life Cover Ratio falls below [ ]:1 or Project Life Cover Ratio falls below [ ]:1
- Any insurance in relation to the Project becomes voidable (whether for lack of disclosure, breach of a condition or otherwise) or is cancelled
- Revocation of, or alteration of the terms of, any consent or licence required in connection with the Project
- Damage to all or any material part of the Project Assets
- Abandonment of the Project
- Force majeure continues for more than [ ] consecutive days (or for more than [ ] days in any year) under any Project Document
- Nationalisation or expropriation of all or a material part of the Project
- Force majeure continues for more than [ ] consecutive days (or for more than [ ] days in any year) under any Project Document
- Nationalisation or expropriation of all or a material part of the Project
- The Independent Engineer certifies that, in his opinion, the Project Completion Date is unlikely to occur by [ ], or the Project Completion Date does not occur by [ ]
- Cross-default on the Borrower, Completion Guarantor or any Major Project Party
- Insolvency of, or insolvency or similar proceedings affecting, the Borrower, Completion Guarantor or any Major Project Party
- Change in control of the Borrower, the Completion Guarantor or any Major Project Party
- Any party to a Project Document serves a termination notice under such Project Document or a Project Document is terminated.

As noted earlier, this distinction is only really of significance where the project company is not a special purpose vehicle and therefore has assets other than the project in question which the lenders may seek to attach or appropriate in satisfaction of the project loan. It will also be of significance where the sponsors/shareholders have agreed with the lenders to procure performance of the project company's covenants. Where the project company has no assets apart from the project, then a claim in damages will give the lenders little comfort or recourse over and above that which it already has against the project company.

## 8.2 Project Bank Accounts

It has already been noted that one of the key features of project loan documentation will be the requirement that the project lenders control all the project cash flows. This control is usually implemented through the requirement that the borrower (and other relevant project parties) open a number of bank accounts with either the facility agent or another bank (the project accounts bank). These bank accounts will, of course, be charged in favour of the lenders as part of the overall security package.

At the very minimum there will be two such accounts. One account, the disbursement account, will be used in connection with drawdowns. All drawdowns under the project loan will be paid into the disbursement account and the project company will be permitted to withdraw sums from the disbursement (or drawdown) account, say, once a month against appropriate evidence that the payment in question was due. In the case of large items (e.g. payments to suppliers or contractors) the account bank may be authorised to make the payment direct to the payee on behalf of the project company. This is to give the lenders an additional layer of comfort that monies will not go astray. The second account, the proceeds (or project receipts) account, will be the account to which all sums payable to the project company in connection with the project will be credited. These payments might include sales proceeds, insurance receipts, liquidated damages payable under the project documents to the project company, sponsor payments etc. The project company will be entitled to withdraw from the proceeds account sums necessary to meet its operating costs, taxes, debt service, other payments that it is required to make in connection with the project and, perhaps, dividends or other distributions to shareholders. Often, the proceeds account is split into a number of different accounts for different categories of receipts where different conditions are to apply to different categories of receipts. For example, insurance receipts may or may not be payable to the project company depending upon what type of claim they relate to.

These accounts will usually be interest bearing and sometimes where there is a likelihood that sums will remain deposited in these accounts for longer periods, provision will be made for the investment of balances into low-risk investments (e.g. government securities). Investments, however, will be controlled by the account bank and will themselves form part of the overall security package. An example of the type of investments that would be permitted is set out in Fig. 18.

One of the key features of these account provisions will be the establishment of a strict order of application (or payments waterfall as it is often referred to) so that when the account bank receives payments it knows how to apply them and in which order of priority. Therefore, if there are insufficient funds in the project accounts on any particular day, the account bank will know which payments it needs to make first. As one might expect, payment of the project company's operating costs will come fairly near the top of the payments waterfall whereas payment of dividends and other distributions to shareholders will come fairly near the bottom of the payments waterfall. There can often be considerable debate between different classes of lenders as to the correct order of application amongst their respective loans. The usual approach is that all interest is paid before principal and then all principal is paid pro rata unless one group of lenders is expressly subordinated. An example of a payments waterfall is set out in Fig. 18.

## 8.3 Appointment of Experts

One of the features of project financing is the extensive use of experts by the lenders. Whilst the lenders themselves (or at least some of them) will profess expertise in the structuring of the financing package for a project, there are many technical areas associated with the project where the lenders will need the resources of external consultants and other experts. For example, in an oil and gas project they will need to employ the services of external engineers who are able to advise them on the geology of the reservoir, the quantity, quality and recoverability of the reserves, when mechanical completion has occurred, etc. Another example would be traffic forecasting experts for a road or tunnel project. Although some lenders will employ internal engineers to help them with such matters, most banks do not have this resource and, in any event, will want the protection of

external consultants. In all of these cases, the experts employed play a crucial role in advising the lenders since in most cases it is the data that they provide as forecasts that is fed into the banking cases for the project. Other experts regularly employed in projects are environmental and insurance experts who will be retained to provide reports and advice to the lenders on these aspects of the project.

**Fig. 18**

#### **Authorised Investments**

An investment shall be an Authorised Investment if:

- It is a debt instrument
- It has, at the time it is acquired by or on behalf of the Security Trustee or the Project Company, a remaining term to maturity of 180 days or less
- It is either denominated in US Dollars or fully hedged against any exposure to currency exchange fluctuations against the US Dollar by a forward exchange contract on terms and subject to documentation approved by the Security Trustee
- The relevant issuer, debtor or guarantor is either (i) a person whose long-term debt securities are for the time being rated [A+] or better by Standard & Poor's Corporation or [A1] or better by Moody's Investors' Services, Inc. or (ii) the United States of America or any agency or instrumentality of it and
- It is not a bearer instrument.

#### **Payments Waterfall**

- First, to meet any sums then due to the Agent, the Account Bank, the Technical Bank or the Trustee (in each case in its capacity as such and pro rata)
- Second, in and towards transfers to the Operating Account in order to meet Operating Costs falling due in the next [ ] days
- Third, in or towards payment of the costs, fees and expenses of the Financing Parties then due (to the extent not paid pursuant to "FIRST" above)
- Fourth, in or towards payment of interest then due
- Fifth, in or towards payment of principal then due
- Sixth, transfers total Debt Service Reserver Account of any sums required to at that time
- Seventh, transfers to the Maintenance Reserve Account of any sums required to be paid to that account at that time and
- Eighth, transfers to the Distribution/Dividends Account.

Whilst these experts are retained by the lenders and are answerable to the lenders, they are in fact paid for by the project company (or the sponsors). Many borrowers, not surprisingly, object to having to pay for these experts, but in reality they have little choice since in most cases the lenders are not prepared to rely on the project company's or the sponsor's own analysis of the position or indeed the experts and consultants retained by them. Occasionally if the project company or the sponsor has retained a firm of experts of international repute to advise it on a particular matter, the lenders may be prepared to accept their report, but almost certainly only on the terms that they have seen and approved the terms of reference for the appointment in the first place and the report is expressly issued to them as well (therefore giving them a basis to sue should an action arise).

### **8.4 Information and Access**

The supply of reliable and accurate information in connection with a project is of crucial importance for the lenders and their advisers. Likewise, access to the project and its facilities will also be important for the lenders to be able to check regularly on progress and to monitor compliance with the terms of the documentation. The project loan agreement will contain detailed provisions on the type of information required and the frequency of delivery. The following are examples of the type of information usually required by lenders:

- Annual accounts and financial statements
- Periodic (e.g. monthly) progress reports during project construction
- Architect's certificates etc., accompanying drawdown requests together with supporting invoices
- Copies of material notices and communications received under all project agreements
- Copies of communications from relevant authorities
- Details of all disputes and claims in connection with the project
- Periodic reports from experts
- Copies of all insurance documentation and claims
- Copies of all consents and permits relating to the project and
- Certificate of compliance with cover ratios etc.

There is often a danger that the project company becomes overwhelmed with the information requirements from the lenders and that the lenders themselves get bombarded with excessive information, a lot of which they don't really need. There is a balance to be struck here and the parties need to take a sensible approach.

As noted above the lenders will want access to the project and the project facilities. They will also want their experts and consultants to be able to visit the project site from time to time in connection with preparation of their reports. This should not be objectionable to the project company provided it receives appropriate notice and the experts comply with safety requirements and other reasonable stipulations imposed by the project company in relation to site visits. Confidentiality will usually be an issue and the experts will usually be requested by the project company to sign a confidentiality undertaking.

## 8.5 Cover Ratios

One of the key features of project finance loan documentation is the use of cover ratios. Just as bankers in unsecured lending will use financial ratios to measure the financial health or well-being of a borrower from time to time, so will the project lender's use cover ratios to assist it in evaluating the performance of the project both in the short term and over the life of the project.

There are two main cover ratios used by project lenders:

- Annual Debt Service Cover Ratio: this tests the ability of a project's cash flow to cover debt service in a particular year
- Loan Life Cover Ratio and Project Life Cover Ratio: these ratios test the ability of a project's cash flow over, respectively, the loan life and the project life to repay the loan.

Cover ratios such as these will be used for a variety of different purposes in the loan documentation. For example, it is likely that it will be a condition precedent to each drawdown that each of the agreed cover ratios will remain satisfied following such drawdown. If a cover ratio is not so satisfied, then the drawdown will not be permitted (although sometimes a partial drawdown may be permitted). The cover ratios may also be used as a tool in the pricing of the loan. Thus, if the project is performing above expectations then the borrower might reasonably expect to pay a lower interest margin on the loan to reflect the fact that the lenders are assuming a lesser risk. Conversely, if the project is performing less well then the lenders will expect a higher margin to reflect the increased risks they face. Another use of the cover ratios will be in the events of default where the lenders will set cover ratios, at a slightly lower level, which will trigger an event of default if they are breached. The levels at which the default cover ratios are set will obviously reflect a position where the lenders have real concerns about the ability of the project to generate sufficient cash flows to adequately service principal and interest over the life of the loan. Other uses of the cover ratios might be in fixing minimum amounts of repayment instalments and in controlling the payment of dividends or other distributions to the shareholders.

The method of calculation of cover ratios is broadly the same from one project to another. The lender will construct a computer program (or model) into which they will input all the projected costs that will be incurred by the project together with the project's forecast receipts. The lender's will have to make certain assumptions as to future variables such as interest rates, inflation rates, foreign exchange rates and (unless a fixed price is agreed for products) product prices. The model will, therefore, contain all of the relevant financial information necessary for calculating the cover ratios as well as other information concerning the project. The starting point for the lenders will be a "base case" model which will reflect the lenders' opening evaluation of the project at financial close. The base case will have been agreed with the borrower and its advisers and should show the cover ratios being satisfied throughout the life of the project. However, since in constructing the base case, the lenders will have made a number of assumptions, it is axiomatic that the underlying fundamentals of the project as well as other matters such as interest rates, exchange rates, inflation rates, etc., will change over the life of a project. The lenders will, therefore, in addition to the base case construct a variety of other cases (or sensitivities) to test the robustness of the project economics in various other situations. These might include the following sensitivity cases:

- Changes in interest rates/exchange rates
- Changes in operating costs (including, where appropriate, fuel supply costs)
- Changes in income levels
- Occurrence of cost overruns
- Delay in completion or start-up
- Changes in taxation rates.

In running these sensitivities, the lenders will be looking to see in which circumstances the cover ratios will not be met and how the lenders can cover this risk. Ultimately, it may mean that the ratio of debt to equity in the project or some other aspect of the project's economics has to be adjusted in order to ensure that the cover ratios are satisfied or that some other security or support from a shareholder or other third party is obtained by the lenders.

It will be apparent that the assumptions used in these banking cases (as they are commonly referred to) are of considerable importance. For example, in an energy project, an energy company may take a very different view as to likely oil, gas or electricity prices and interest and exchange rates over a 10-year period from a lender. Indeed, even between different lenders there will be different views on such matters. Not surprisingly, lenders tend to take a more conservative approach to forecasting. However, if they are too conservative then this can make some projects unbankable. There is often, therefore, during negotiations on project loan documentation considerable scope for discussion on how these assumptions are calculated and by whom. There is no hard and fast rule or right or wrong approach to this. Typically, however, a distinction will be made between financial assumptions (such as interest rates, exchange rates, discount rates, inflation) and technical assumptions (operating costs, capital costs, taxes, etc.). It is likely that the lenders will want to fix the financial assumptions on the basis that these lie within their field of expertise. On the other hand, the banks may well concede that the technical assumptions should be matters that the borrower should be in a good position to estimate. However, it is unlikely that the borrower will be allowed a completely free hand with all technical assumptions and the lenders will want to see these agreed with their own engineers. Sometimes, if no agreement on the technical assumptions can be reached, then the banks will agree to submit the matter to an agreed third-party expert who will decide the matter on behalf of the lenders and the borrower. It is less likely that the banks would agree to the appointment of an expert to determine the financial assumptions. As we have already seen they consider themselves experts on such matters in any event! From a borrower's perspective, therefore, it will be looking to try to establish as objective a standard as possible for fixing the financial assumptions.

Having agreed the assumptions to be used in the banking cases, the calculation of the cover ratios becomes a simple arithmetical exercise. It is usually the case that a banking case will be run periodically (six monthly) throughout the life of the project as well as at given points in time such as on drawdown.

One of the key features in the calculation of the loan life cover ratio and the project life cover ratio is the use of discounting. Because both of these cover ratios project forward and make assumptions as to future costs, receipts, etc., in order to arrive at a present day value of these sums for the purposes of establishing the cover ratios at a particular time, it is necessary to discount these items. The usual method of discounting (or establishing the net present value of future cash flows) is to split the relevant period into, say, six-month periods (usually coinciding with interest periods/repayment periods) and to calculate the project costs/receipts for each of these periods, aggregate them and then net present value (discount) them at the agreed discount rate in order to calculate the net present value and internal rate of return. The discount rate is usually fixed by reference to current interest rates. Having established the net present value of the project's cash flows this is then divided by the projected loan values remaining outstanding at the time the calculation is carried out.

Part of the methodology in using cover ratios will be to enable the lenders to give themselves sufficient comfort. Thus, for example, the lenders may take the view that a reasonable safety margin in a given project would be a project loan of two-thirds of the net present value of forecast project cash flows. This produces a cover ratio of 1.5 to 1 (being the inverse of two-thirds) which is not an untypical loan life cover ratio. Cover ratios can be as low as 1.3 to 1 in projects with particularly strong fundamentals, but it is rare to see a lesser figure as this affords the lenders very little margin for error.

The principal difference between the calculation of the loan life cover ratio and the project life cover ratio lies in the calculation of the project's forecast receipts. No lender will construct a project loan on the basis that final repayment coincides with the end of a project's useful life. Instead, the lenders will want to see that the loan is repaid some years before the end of the project's useful life. Therefore, in calculating the loan life cover ratio the lenders are looking at forecast project receipts over the life of the loan only whereas with the project life cover ratio they are looking at the project's forecast receipts over the life of the project itself. For example, in many oil and gas projects, the typical approach of lenders would be that they would not expect to lend against the field's "reserve tail" (typically 25 per cent of the forecast reserves) since these are likely to be the most risky to extract in full and on time. In such a case, therefore, the lenders have constructed two important safety barriers. In the first place they will have fixed a cover ratio at a level that they feel comfortable with (in the above example 33 1/3 per cent) and in

the second place they will only lend against, say, 75 per cent of project receipts.

The calculation of cover ratios is, therefore, a key feature of project loan documentation and one that requires considerable attention to detail in the loan documentation. It is one of the areas where it is essential for the legal advisers and the bankers to work especially closely.

## 8.6 Governing Law and Jurisdiction

The loan agreement for most internationally syndicated project financings will usually be governed by either the laws of England or New York. There are a number of reasons for this. Perhaps the most important reason is the feeling on the part of many banks that when lending internationally they prefer to see the laws of an independent country, such as England or the USA, apply to the lending documents. This is not to say that the lenders distrust other laws. It is simply a question of being more comfortable with the degree of independence offered by the laws of a third country. It is also undoubtedly the case that where they are dealing with complex international financings, lenders also are comfortable with the degree of knowledge and sophistication of the courts in England and the USA. Not surprisingly, lawyers in those two jurisdictions as a result have managed to establish themselves as leading experts in documenting and negotiating international project financings. This is not to say that lenders will not consider using other laws to regulate their loans. However, there will usually have to be some compelling reasons to persuade the lenders to accept other laws.

The position is slightly different with respect to security documents. As has been seen in section 6.9 the proper law of a security agreement will depend to a large extent on the nature of the security interest and/or the location of the asset in question being created. It is, therefore, not simply a question of the lenders selecting a law of their choice. It is far more a question of what is the appropriate way in which to take a security interest over a particular asset in a particular country. Thus, for example, there would be little point (and indeed it would be dangerous) in stipulating that English or New York law should apply to a mortgage over land in, say, Indonesia. In such a case, what is important is to ensure that the security interest over the land is valid and effective according to Indonesian law and that other laws will simply not be relevant. Similarly, if the lenders are looking at taking security over money in a bank account in France, then French law would be the proper law of the security and the security should be created in accordance with French law.

In most cases it will be obvious which is the proper law of the security interest but this will not always be the case and where there is doubt, the parties will normally look at all the surrounding circumstances and see which law has the closest connection with the asset over which security is being taken or, perhaps, where enforcement is most likely. If all else fails, one might then look at the law governing the loan agreement and apply the same governing law. The whole area of choice of law and conflicts of laws is a complex subject and outside of the scope of this Guide.

When it comes to governing law for project documents the position is less straightforward. In most jurisdictions the parties to a commercial agreement will be entitled to select the governing law to apply to that commercial agreement subject to certain ground rules (such as public policy and non-evasion of mandatory laws of a country). Not surprisingly, lenders on international project financings would prefer to see English or New York law governing all the key project documents. This, however, is seldom achieved. For example, insisting that a power purchase agreement between a project company and a local state electricity company be governed by a law other than appropriate domestic law is always going to be an uphill struggle. Likewise, most concession agreements between a governmental entity and the concession company are governed by the laws of the host country. The grey area comes where there is a contract, such as a fuel supply agreement or offtake agreement, that is entered into between parties in different countries and therefore there is no compelling governing law. In these cases the lenders are likely to be more successful in stipulating that an independent law such as English or New York law should apply.

The question of jurisdiction is, in most cases, a less controversial issue. If the loan agreement is expressed to be governed by English or New York law then it will be a requirement of the loan agreement that the project company submits to the jurisdiction of the courts in those countries for the purposes of legal proceedings relating to the loan agreement. Having accepted that one of these laws will apply to the loan agreement there is usually no objection to a submission to jurisdiction. It is sometimes the case that if the project company has or is likely to have significant assets in another country, then the lenders will require a submission to the jurisdiction of that country in case it is necessary or expedient for the lenders to institute legal proceedings against the project company in that particular country. Most agreements will provide that the submission to a particular jurisdiction is made on a

non-exclusive basis thereby allowing the lenders to bring proceedings in any other jurisdiction that may be appropriate or convenient at the time of enforcement.

Finally, if the project company is wholly or partly owned by a government or state entity then it is likely that the lenders will require that the project company waives any right of sovereign immunity that the project company may have in respect of any legal proceedings or enforcement action against it or any of its assets.

## 8.7 Completion Issues

In many projects, particularly infrastructure projects, one of the key milestones will be when the project achieves "completion". This will mark the end of the development and construction phase of the project and the start of the operational phase. The significance of this milestone is that one of the key risks, namely construction risks, will be substantially reduced once completion has occurred. In recognition of this reduction in risk it is often the case that the interest rate will be reduced following completion (assuming everything else is going to plan!).

This milestone also marks the time when the project should be moving into its income generating phase and therefore the repayment schedule will usually be triggered by the occurrence of completion.

The completion test for most infrastructure projects will usually comprise at least three elements:

- Confirmation that the project is physically complete so that it can be put to use
- Demonstration that the project meets the required performance criteria
- Demonstration that the project can be expected to operate reliably as represented by the project company over the term of the loan.

It will also usually be stipulated that completion will not occur unless or until the project company has furnished evidence that all consents and authorisations for the equipment/plant to enter into commercial production have been granted.

One of the key issues concerning the completion test will be the actual manner in which the completion test is treated as being satisfied. The lenders will usually seek to stipulate that completion will only be treated as having occurred when the lenders' engineer is satisfied that the various elements of the completion test have been met and he has issued a certificate to the lenders to this effect. The project company, on the other hand, will seek to impose the influence of its engineer in determining the completion test. Given the significance of this milestone for the lenders it is not usually acceptable to them to allow confirmation of this milestone to rest with the project company and its engineers. One compromise that is often agreed is that the two engineers will meet to determine whether the completion test has been satisfied, and that if they agree it has been satisfied then the lenders' engineer will issue the completion certificate. With this compromise the lenders' engineer is still left in control of the process but what is removed is any discretionary or subjective element.

## Section 9

# Export Credit Agencies and Multilateral Agencies

### 9.1 The Role of Export Credit Agencies in Project Finance

Export credit agencies (ECAs) have typically been established by governments to assist in the export of goods or services which are sourced from that country. ECAs can also be used by a government to provide aid or assistance to developing countries by helping to finance the export of goods or services to those countries. In addition they can also satisfy local political needs.

ECA assistance is typically provided by way of:

- political risk insurance
- commercial risk insurance (this can have the same commercial effect as a guarantee)
- interest rate support
- direct lending by the ECA (usually to the importer/buyer).

### 9.2 An introduction to The G7 ECAs

The oldest ECA is the Export Credits Guarantee Department (ECGD) of the UK which was established in 1919 to aid UK exports which had been badly affected by the First World War. The war caused many potential importers of goods from the UK to look elsewhere for goods. ECGD was originally established under the Overseas Trade (Credits and Insurance) Act 1920. The Act gave the Board of Trade powers “for the purpose of re-establishing trade ... between the UK and any country” to grant credits to UK persons where it appeared “advisable to do so by reason of circumstances arising out of the war” in connection with the export to specified countries of goods produced or manufactured in the UK.

The ECA of the US is the Export-Import Bank of the United States (known as “USExim”) and was established in 1934 at the time of the Great Depression to improve domestic employment prospects by assisting the financing of US exports. For example, USExim has always supported and continues to support Boeing aircraft sales around the world. This is an example of an ECA satisfying domestic political policies.

An example of an ECA satisfying a diplomatic/political function is the cover provided by USExim to Russia throughout 1993. This was largely a product of the US Government’s policy to assist Russia’s move towards democracy.

The ECAs of the other G-7 nations are HERMES (Germany), COFACE (France), SACE (Italy), JBIC (Japan) and EDC (Canada).

### 9.3 The Advantages of Involving ECAs in a Project

The advantages of involving an ECA in a project include:

- an ECA can usually provide political risk insurance which may not be available from the insurance market, or only available at a cost which makes the project uneconomic. This can be the key to whether the project proceeds, especially where the project is situated in a politically or economically “troubled” country
- the repayment periods of ECAs are normally longer than those which commercial banks would be prepared to make available. ECA repayment periods are often in excess of ten years. The long repayment periods can increase the debt capacity of a project resulting in an increase in the return on equity
- where a loan is supported or guaranteed by an ECA, the lending bank can book that loan as a sovereign credit risk. The credit risk will be that of the host government of the ECA. This offers several advantages. The interest rate charged by the bank will be substantially reduced to reflect the lower risk. It will be easier for the bank to obtain internal credit approvals and results in lower costs for the bank in complying with capital adequacy requirements. The credit risk on an ECA based in an OECD country would currently be zero-rated if the ECA was government owned or backed.

Further advantages can be derived by involving a number of ECAs in the financing. This can be achieved by a multinational consortium sourcing its goods and services from a number of countries. This may qualify the financing of the relevant goods and services for support from the ECA of each country which is involved. It is important to note that some ECAs will finance goods and services which are sourced partly outside the country of

the ECA (see section 9.7).

An example of a project structure involving ECAs is set out in Fig. 10.

#### 9.4 The OECD Consensus

ECAs are not unrestricted in the manner in which they provide support to assist the export of goods and services. Clearly the offer by an ECA of excessively generous terms to assist exports from its country could create unfair competition. Exporters would be able to offer advantageous terms when compared with terms offered by exporters from another country.

All OECD member countries are subject to the restrictions set out in the "Consensus". In addition the Berne Union (the International Union of Credit and Investment Insurers) regulates credit terms for certain goods. The Consensus resulted from negotiations on Guidelines for Officially Supported Export Credits which were led by the OECD in 1973. It has been updated over the years. Changes which came into effect on 1 September 1998 for an initial three-year trial period were a direct attempt to try to mitigate criticisms faced by ECAs in respect of their inflexible and time consuming procedural requirements. The Consensus seeks to establish a "level playing field" as between its members. It is important to remember that the Consensus rules (the "Rules") were not originally formulated with project finance in mind and so some of the Rules may seem inappropriate in the context of a project financing. The 1998 changes go some way towards correcting this.

The Rules which are relevant to a project financing are summarised below.

- The maximum term of the financing is subject to a maximum average weighted life of 5.25 years from the starting point of the credit. This has superseded the previous Rule requiring a maximum term of credit of 10 years for poorer countries, less for more wealthy countries. The project company can have total flexibility in both the repayment profile and maximum repayment term for an ECA loan. This has superseded the previous requirements that:

- (a) the loan should be repaid on a regular basis in equal instalments and
- (b) repayments should be made at least every six months, with the first instalment to be made no later than six months after the starting point of credit.

The project company can have total flexibility in nominating the first principal repayment date for an ECA loan. However, the average weighted life of an export loan may be extended to a maximum 7.25 years, provided that:

- (a) the first repayment of principal due is within two years of the starting point of credit for the project and
- (b) the final repayment is due within 14 years of the starting point of credit

- The starting point will vary according to the nature of the contract which is being financed. The start date for a contract for the supply of completed goods will be the date the buyer takes physical possession of those goods. In a contract for the supply of capital equipment (for complete plant or a factory) where the supplier/contractor has no responsibility for commissioning, it is the date on which the buyer is to take physical possession of the equipment. In a construction contract where the supplier/contractor has no responsibility for commissioning, the start date is the date on which construction is completed. Where the supplier/contractor is responsible for commissioning, it is the date on which construction is completed and the equipment has been tested to ensure that it is ready for operation. This last test is likely to be the most relevant in the context of a project financing where the project assets are to be built under a turnkey construction contract which provides that the turnkey contractor is responsible for commissioning
- It should also be noted that the opportunity to extend the average weighted life of the export credit loan to 7.25 years is not available for project finance cases in high-income OECD countries. High-income OECD countries have been defined by the World Bank as those countries with a GNI per capita above US\$9,076 (for 2002). Projects in these countries are only entitled to the benefits available under the Rules if the export credit represents less than 50 per cent of the financing plan and ranks equally with the other debt in the project
- It should be noted that no single repayment of principal should exceed 25 per cent of the total principal sum repayable over the life of the ECA backed loan
- Where the ECAs are providing official financing support:
  - (a) for repayment terms of up to and including 12 years, the normal contractual interest rate ("CIRR") shall apply and

(b) for repayment terms in excess of 12 years and up to 14 years in project finance cases where it is permitted under the Rules that the weighted life of the credit loan may be extended to 7.25 years, a surcharge of 20 basis points on the CIRR shall apply for all currencies.

- Interest may not be capitalised during the repayment term.
- The purchaser of the exported goods and services must pay at least 15 per cent of the export contract value in cash on or before the starting point of credit
- Any increase in the average repayment life of the project will have an impact on the ECA premium payable, in line with the minimum premium fees arrangement (known as the Knaepen Package) which came into effect on 1 April 1999 and has been incorporated into the Rules
- ECAs are obliged to notify the other participant ECAs, within 20 calendar days of issuing any commitment of support, of the key financing features of the relevant project, including an explanation as to why the sponsors/exporters have requested more flexible financing terms.

The Consensus also contains special rules which apply to certain sectors (e.g. ships, aircraft, nuclear power stations).

All OECD ECAs must comply with the Rules set out above. In addition each ECA will apply its own rules. Set out in the table at the end of this section is a summary of certain additional requirements of the project financing programmes of the G7 ECAs.

## 9.5 Departing from Consensus

It is possible for an ECA to offer support on terms which do not conform to the normal Rules. This is known as “departing from Consensus”. However, if an ECA wishes to offer terms which are more favourable than the normal Rules it must give prior notice to the other ECAs and give them an opportunity to match or improve terms. An ECA may also propose a “common line”; that is a common position in relation to a particular country or class of transaction. If an ECA proposes a common line it must give notice to all other ECAs prior to the closing date for receipt of bids (where relevant). A common line proposal can be more or less onerous than the Rules. If a common line is agreed it will override the Rules for the relevant project and will remain in force for two years and can be renewed thereafter. Any offer of finance on more favourable terms than the common line will be treated as a departure from the Rules and must comply with the above procedure.

## 9.6 Categories of ECA Support in The Context of a Project Financing

### Political Risk Insurance

A typical political risk insurance policy will provide that if as a result of a “political event” the project company defaults on the payment of principal or interest on a project loan, the ECA will make good the default. ECGD provides two levels of political risk cover. In a “standard” policy the risks covered would include expropriation, war, transfer of foreign exchange and restrictions on remittances. Additional political risk cover can also be provided. This provides cover against the risk of the host government breaking specific undertakings which prejudice the viability of the project. For example, the breach by the host government of its undertaking to connect a power station to the national grid, thereby depriving a project company of any means to generate revenue.

### Commercial Risk Insurance

This type of cover is sometimes phrased as “insurance” or as a “guarantee” and can be structured in a variety of ways. However, the commercial effect is usually that the ECA “guarantees” the whole or a portion of the repayment of principal and payment of interest on a loan made available by the banks to the project company. This type of cover will result in the ECA taking project risk. The ECA providing the cover will therefore need to analyse carefully all elements of project risk before agreeing to provide it.

This type of cover is typically based on a buyer credit or a supplier credit type facility (see Fig. 19).

Under the ECGD buyer credit facility a supplier/exporter of goods agrees to supply goods to a buyer/importer: a bank agrees to make a loan available to the buyer/importer to allow it to pay the supplier/exporter for the goods. ECGD guarantees up to 100 per cent of the principal and interest due to the bank under the loan together with interest on the due amount under the terms of a support agreement. ECGD will pay any amounts which remain unpaid 90 days after the due date. Drawdowns can operate on a disbursement and/or on a reimbursement basis. Drawdowns under the loan agreement on a disbursement basis are made directly to the supplier/exporter on receipt of:

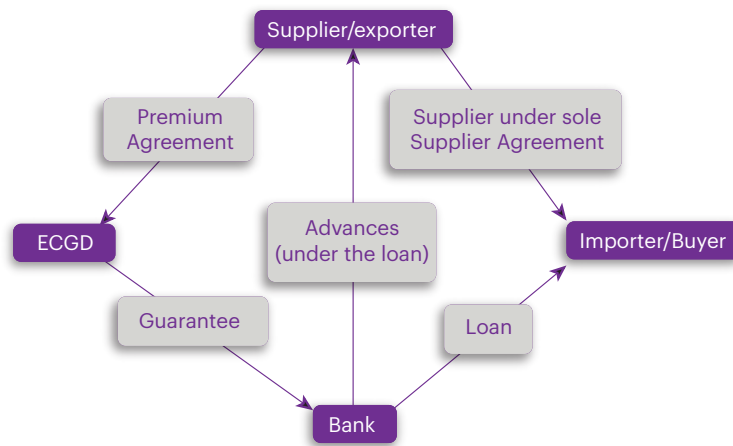
- Evidence of delivery of the goods or services (e.g. bills of lading or delivery notes)
- Qualifying Certificates, where the supplier/exporter certifies that the goods or services are eligible (under ECGD's rules) and that they have been delivered or performed.

Alternatively, drawdown can also be made on the reimbursement basis. This is where the buyer/importer receives funds from the banks to reimburse cash payments made by it to the supplier/exporter. The buyer/importer must submit a reimbursement certificate supported by a receipt from the supplier/exporter.

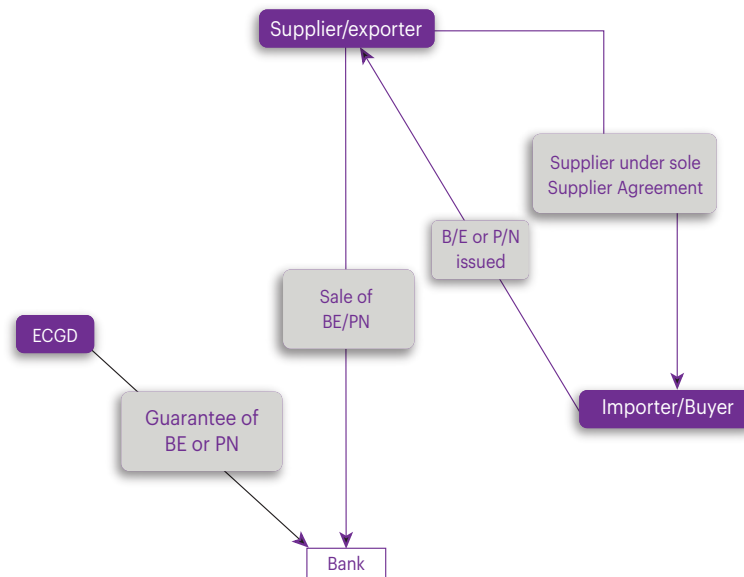
ECGD will normally enter into a premium agreement with the supplier/exporter which provides ECGD with recourse against the supplier/exporter if ECGD pays claims to the banks under the support agreement at any time when the supplier/exporter is in default under the supply contract. The amount of recourse is usually limited to 10 per cent of ECGD's maximum liability under its guarantee to the banks. In addition the proceeds of any performance bond provided by the supplier/exporter to the buyer/importer must be paid to the lending banks.

## ECGD Buyer Credit Facility

Fig. 19



## ECGD Buyer Supplier Facility



BE - Bill of Exchange  
PN - Promissory Note

Due to the significant administration costs involved, only projects with ECGD-supported loans in excess of £20 million will normally be considered in the context of a project financing.

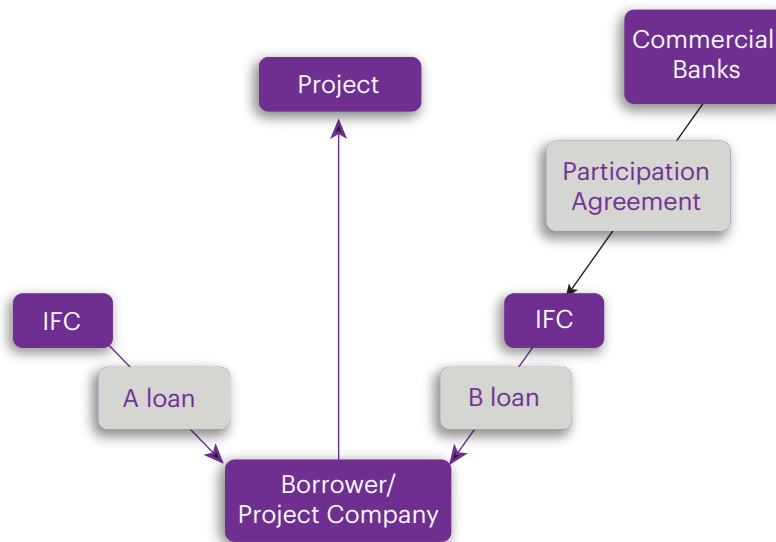
The buyer credit facility is typically linked to the ECGD's Fixed Rate Export Finance Scheme (see Interest Rate Support below) if the buyer/importer wants the benefit of a fixed rate. The supplier/exporter is normally responsible for paying the premium to ECGD (although costs are usually passed on to the buyer/importer under the terms of the supply contract). However, for project finance cases it is more usual to see premium paid by the borrower as a financed amount and since ECGD is willing to agree that 85 per cent of premium can be financed from the ECGD-supported loan. The premium is calculated as a percentage of the loan value.

ECGD accepts that in considering the eligibility of any project for support there are no precise criteria. However ECGD will expect international commercial banks to be involved and to receive the same security as ECGD. In

addition, where ECGD is providing commercial risk cover, ECGD will usually only support loans representing not more than 40 per cent of the total project capital requirement (both debt and equity) and support from all ECAs (including ECGD) should not exceed 60 per cent of this amount. ECGD will normally expect at least 25 per cent of the project capital requirements to be financed from equity (or subordinated loans). In addition the involvement of a regional development bank or an international financing institution such as the International Finance Corporation will be regarded favourably.

## World Bank/IFC A/B Loan Structure

Fig. 20



## Company Participation Agreement

A supplier credit has the same advantages for both exporters and importers; however, the structure is different. Rather than making a loan available to the buyer/importer, a supplier credit operates facility by the issue and discounting of bills of exchange or promissory notes.

- The supply contract provides for deferred payment terms and the issue of bills of exchange or promissory notes by the buyer/importer upon delivery of the goods or services.
- The bills of exchange or promissory notes are guaranteed by a surety satisfactory to ECGD (for example a creditworthy parent company, or the buyer's/importer's government).
- The bills of exchange or promissory notes are purchased by the supplier's/exporter's bank and are guaranteed by ECGD under the terms of a Master Guarantee Agreement. The bank will also have obtained a Certificate of Approval. ECGD will guarantee up to 100 per cent of the principal and interest payable on the bills of exchange or promissory notes upon a payment default. Interest rate support is also usually available.

ECGD can also guarantee supplier credits where the bank enters into a loan contract with the buyer/importer. Such loan contracts may or may not be secured by bills of exchange or promissory notes.

Another major difference between the buyer credit and the supplier credit facilities is that ECGD rarely seeks recourse against the supplier/exporter under a supplier credit facility. This is generally because supplies under a supplier credit facility are relatively standard items. However, recourse may be sought where the supplier/exporter has a high degree of contractual responsibility. This may well be likely in the context of a project financing.

It is important to note that ECGD will normally guarantee the financing bank 100 per cent of the loan value. Many other ECAs will only provide either guarantees or insurance cover for up to 95 per cent of the loan value. This may be problematic in the context of a project financing as the financing bank will be required to take the risk on the unguaranteed balance of 5 per cent unless another party is prepared to guarantee the residual amount. A guarantee of less than 100 per cent of the loan value will almost certainly lead to increased costs for the project company and/or the exporter/supplier.

## Interest Rate Support

Interest rate support is typically provided by the ECA (or an institution related to it) agreeing to pay to the lending banks the difference between the relevant CIRR (see section 10.4 above) and the rate at which the banks fund themselves (typically LIBOR) plus a margin. This results in the project company/borrower paying an effective interest rate equal to the relevant CIRR while the banks receive a commercial return on their loan.

## Direct Lending (and Equity Stakes)

Some ECAs, for example USExim and JBIC, will lend directly to the project company. For example in 2002 JBIC lent ¥60 million to the Simhadri Thermal Power Station Project in India. EDC (the Canadian ECA) has made a number of direct loans and has also taken equity stakes in projects.

### 9.7 The Changing Role of The ECA in Project Finance

The approach of ECAs to project finance has changed significantly in recent years. The main reason for this has been the move towards infrastructure projects which are both sponsored by and financed by the private sector rather than relying on sovereign debt support.

There has been a significant growth in the requirement for private sector project finance. Key features of these financings have been the increasingly complex contractual and debt financing structures often involving commercial banks, ECAs, multilateral agencies (such as the World Bank) and regional development banks (such as Asian Development Bank or European Bank for Reconstruction and Development).

The resulting increase both in deal flow and in complexity has resulted in ECAs devoting more resources to analysing project risk and allocation and the economics of the projects. In the past this was less of a problem because projects were often supported by the host government. All of the G7 ECAs now have a specialist project finance department (ECGD's project finance scheme was relaunched in 1994 whilst USExim's was formed in 1994). USExim has a designated project finance business development team whose job it is to examine and evaluate an application made to USExim. USExim have committed themselves to carrying out this preliminary evaluation within 45 days of receiving an application. In contrast ECGD has left the responsibility for processing project finance applications to its country's underwriters. However, ECGD may appoint a specialist adviser to report on specific aspects of a project.

This change in the ECAs' approach to project finance has resulted in their being prepared to assume a wider range of risks. For example, many ECAs are now prepared to cover both political and commercial risk during the construction phase. ECAs have traditionally only covered political risk. Coverage of commercial risk, especially during the construction phase, clearly requires an understanding by the ECAs of the various project risks and their allocation.

ECAs are also willing to finance a proportion of supplies from other countries. JBIC/NEXI will finance up to 70 per cent of supplies from another country as a proportion of the total supplies financed. USExim will finance up to 50 per cent of supplies from another country. Most of the European ECAs will only finance up to 15 per cent (or 30 per cent in the case of supplies sourced from other EU member states). ECGD will finance up to 15 per cent of supplies sourced from another country, but only instead of covering local costs.

## 9.8 ECAs and Credit Documentation

ECAs have differing attitudes towards their credit documentation. Some ECAs require rigid adherence to their standard forms (sometimes requiring that documentation be governed by the laws of the jurisdiction of the ECA). However, ECAs are becoming more flexible, especially with regard to large project financings, where a degree of standardisation of documentation is required in order to simplify the increasingly complex documents.

The detailed terms of an ECA guarantee will obviously differ according to the ECA involved and the governing law of the contract. However, some common principles apply to commercial risk guarantees. They usually provide that the guaranteed banks must exercise their discretion under the loan agreement in accordance with the ECA's directions. This is understandable in that the ECA is assuming the risk of payment default under the loan agreement. In addition the terms of both commercial and political risk guarantees usually provide that the ECA may purchase the banks' interest in the guaranteed loans and so enable them to step into the banks' shoes.

Where all of the parties in a multi-sourced financing agree to have all the credit documentation governed by one law (usually English or New York law) it is possible to simplify the documentary structure for the loans by having a "financing agreement" or a "common terms agreement". This agreement will set out all of the common provisions (see section 9.15 below). ECAs are now very used to the idea of intercreditor agreements to govern the relationship between the different groups of financiers or themselves. Indeed, it is usually in the best interests of an ECA to have an intercreditor agreement as an ECA frequently lends for a longer maturity than the commercial banks. An ECA will therefore need to protect itself against the banks taking a short-term view.

## 9.9 Multilateral Agencies

The multilateral agencies consist of the various global and regional development banks and funds. They are becoming increasingly important sources of project finance. In many cases, their original objective was to channel financing for infrastructure projects and other public works to governments and state-controlled agencies in the relevant part of the world. However, there is currently an increasing emphasis on these multilateral agencies providing project finance for private sector projects. Typically, the involvement of a multilateral agency is used to draw in commercial banks and other private sector providers of project finance to finance projects which the private sector would otherwise find uneconomic or uncommercial. There are a variety of multilateral agencies. Set out below is a review of the World Bank Group and the major regional development banks which are active in Europe and Asia.

### 9.10 World Bank Group

The World Bank Group consists of the International Bank for Reconstruction and Development (IBRD), the International Finance Corporation (IFC), the International Development Association (IDA), the Multilateral Investment Guarantee Agency (MIGA) and the International Centre for Settlement of Investment Disputes (ICSID).

IDA was created in 1960 to provide soft loans to low-income countries which lack the creditworthiness to obtain loans from the IBRD.

ICSID was set up in 1966 to provide conciliation and arbitration services for disputes between foreign investors and host governments arising out of an investment.

The World Bank is mainly funded from the international capital markets and is the largest source of market-based loans to developing countries. It disbursed nearly \$20 billion in loans and grants in the year to 30 June 2002. Although it mainly lends to sovereign states and government agencies, it also lends to private sector entities so long as they are backed by guarantees given by the relevant host government. It will also provide guarantees to commercial lenders for public and private sector projects.

The IFC is the largest multilateral source of loan and equity financing for private sector projects in the developing world. It finances the private sector by both loan and equity investments. IFC does not accept government guarantees and prices its finance and services in line with the market.

IFC will usually make loans available on the basis of the A/B loan technique. This technique encourages commercial banks to lend to projects which would otherwise not be sufficiently attractive to them. The A loan is advanced by IFC at its own risk. The B loan is made available by IFC (as the lender of record) but the funds are

provided by commercial banks. The end result is that the lending is effectively made by the commercial banks at their own risk. However, the commercial banks will benefit from IFC's preferred creditor status. Both World Bank and the IFC loans have preferred status which usually results in them being repaid and excluded from any sovereign debt rescheduling. The sanction for the failure to repay these loans is that neither the World Bank nor IFC would make any further credit available to the relevant government. The structure of this A/B loan structure is set out in Fig. 20.

The relationship between IFC and the commercial banks is set out in a participation agreement. IFC will only lend amounts actually made available to it by the commercial banks under the terms of the participation agreement. IFC will not commit to requiring the commercial banks to make amounts available to it and the borrower therefore has no right to require drawdown of the B loan. This is because IFC wishes to be viewed as the lender of record (rather than the agent of the commercial banks) in order to ensure that the commercial banks are not regarded as the beneficial owners of the interest payments received by IFC. If the commercial banks were viewed as the lender of record then the exemption which the IFC has with regard to withholding tax on payment of interest may be prejudiced. The tax authorities in a particular jurisdiction might still regard the structure as an attempt to avoid tax liability.

MIGA was created in 1988 as an independent member of the World Bank Group. MIGA offers investors insurance against non-commercial risk and technical services in order to promote private investment in developing countries. It offers political risk insurance to foreign investors in a project without requiring counter-guarantees from the host government. The World Bank also makes guarantees available in respect of risks which the market will not bear. A guarantee will take the form of either a partial credit guarantee, a partial risk guarantee or a policy based guarantee. A partial credit guarantee is typically used to extend maturities of finance beyond those which private creditors could otherwise provide: for example, by guaranteeing late-dated repayments or providing incentives for short-term loans. Partial risk guarantees are typically used in limited recourse private projects. The partial risk guarantee will cover the risk of non-performance of sovereign contractual obligations or political Force Majeure Events (for example maintaining an agreed regulatory framework or allowing a power plant to be connected to the national grid in the case of an IPP). A policy-based guarantee covers borrowings for agreed structural, institutional and social policies and reforms.

The legal structure for a World Bank guarantee consists of a guarantee agreement, an indemnity agreement and a project agreement. The guarantee agreement is entered into between the World Bank and the relevant lenders and sets out the terms of the guarantee. The indemnity agreement is entered into between the World Bank and the host country under which the host country counter-indemnifies the obligations of the World Bank under the guarantee agreement. The project agreement is entered into between the World Bank and the borrower and will contain a variety of undertakings (for example, regulating the use of the guaranteed loan and obliging compliance with environmental rules and regulations).

The purpose of the World Bank guarantees is to facilitate the financing of projects which would otherwise be unattractive. This is achieved by the World Bank assuming risks which the market either cannot bear or which would be prohibitively expensive. Therefore, the guarantee may lower the financing costs resulting in an extended loan term. This can be important for long-term infrastructure projects.

ECA	Hermes (Germany)	Coface (France)	ECGD (UK)	SACE (Italy) <sup>1</sup>	JBIC/NEXI (Japan)	EDC (Canada)	USExim (USA)
Separate Department	Since 1988	Since 1995	N/A	Since 1990	Since 1988	Since 1995	Since 1994
Special Project Finance Policy	No, existing policy customised	No, existing policy customised	No, existing policy customised	No, existing policy customised	No, existing policy customised	No, existing policy customised	No, existing policy customised
Covered Risks – construction phase political risk commercial risk – amortisation phase political risk commercial risk	95% 95% 95% 95%	95% 0-95% 95% 70-95%	100% 100% 100% 100%	95% 0-70% 95% 0-70%	100% 0-100% 100% 0-100%	Up to 100% Up to 100% Up to 100% Up to 100%	100% 100% 100% 100%
Local Costs	15%	15%	Case by case in accordance with OECD rules and internal foreign costs rules	15%	15%	15%	15%
Third Country Supplies	10%	20% 30% in case of EU	15% (but instead of covering local costs) 30% in case of EU	15% (but instead of covering local costs)	Up to 70% (depending on programme)	Up to 50%	Up to 50% (no cover provided)
Capitalisation of Interest during Construction	Up to 100%	100%	Up to 100%	100% for up to 24 months	Up to 100%	Up to 100%	
Subsidies but (subsidised rates)	Generally none, but in some cases CIRR via KfW	CIRR	CIRR	CIRR	CIRR	None	Generally none
Risk Analysis – cover for PF possible when country policy “off cover” – feasibility/viability study – assessment of documents – documentation risk	Perhaps possible if security package sufficient Assessment by C&L Deutsche Revision Documents need to be submitted to C&L Deutsche Revision Excluded	Commodity projects with offshore escrow account structure In-house assessment, contracted out in case of large projects and shared with other ECAs in case of multisource – intercreditor agreement – financing documents – project documents – host gov’t undertakings Excluded	Possible if security package sufficiently mitigates host country risks All key project documents to be approved by external and internal lawyers Covered	Not possible unless other ECAs or IFIs involved Assessment by external consultant unless IFI involved in project SACE looks into documents but does not judge the “quality” or legal enforceability Excluded	Perhaps possible if security package sufficient In-house assessment necessary via external consultant – all relevant documents – special attention to off-take agreements and host gov’t undertakings Covered	Perhaps possible if commodity project with escrow account In-house assessment with use of consultants as needed All documents and reports Covered	Perhaps possible if security package different Feasibility study contracted out to independent consultants – contracts – off-take and supply agreement – shareholders’ agreement – legal analysis contracts Covered

ECA	Hermes (Germany)	Coface (France)	ECGD (UK)	SACE (Italy) <sup>1</sup>	JBIC/NEXI (Japan)	EDC (Canada)	USExim (USA)
Risk Sharing Requirements	No requirements specified	Coface generally seeks participation of commercial banks or IFIs	If cover for project risk is sought, ECGD seeks participation of commercial banks or IFIs	Financiers need to take at least 30% of commercial risk	No requirements specified	No requirements specified, preferably co-financed by banks or IFI	No specific requirements USExim may bear 100%
Security Requirements (Selection)	<ul style="list-style-type: none"> <li>- guarantee sponsor for cost overruns</li> <li>- foreign exchange guarantee for local currency projects</li> <li>- completion guarantee</li> <li>- mortgage aspects</li> <li>- escrow account</li> </ul>	<ul style="list-style-type: none"> <li>- pari passu ranking with senior creditors</li> <li>- adequate security package to enable commercial risk cover to be delivered pre-completion</li> <li>- charge on shares in SPC</li> </ul>	On a case-by-case basis	<ul style="list-style-type: none"> <li>- mortgage on SPC's assets</li> <li>- foreign exchange guarantee</li> <li>- completion guarantee</li> <li>- guarantee sponsor for cost overruns</li> <li>- pari passu ranking with other creditors</li> </ul>	<ul style="list-style-type: none"> <li>- mortgage on SPC's assets</li> <li>- security package arrangement common international project finance deal</li> </ul>	<ul style="list-style-type: none"> <li>- pari passu ranking with "senior lenders"</li> <li>- completion guarantee</li> <li>- comprehensive collateral package</li> </ul>	<ul style="list-style-type: none"> <li>- project incentive agreement with host govt for compliance with undertakings (for some countries)</li> </ul>

## 9.11 European Bank for Reconstruction and Development (EBRD)

The EBRD was established in 1991 in order to assist the countries of central and eastern Europe and the CIS with the transition from a state-planned to an open market economy. It aims to achieve this by both investing in projects and assisting the development of financial infrastructure in the relevant countries. EU countries own over 50 per cent of the equity in the bank whilst the US owns 10 per cent and Japan 8.52 per cent. EBRD operates both as a merchant bank and a development bank. Investments are made on a commercial basis and at market rate of return. It will typically fund up to 35 per cent of the total cost of an individual project and requires significant equity funding and debt funding from other co-financiers. The EBRD does not aim to compete with commercial banks, rather it seeks to act as a catalyst to lead other banks into projects. The governments which founded it have provided it with a preferred creditor status (akin to the status enjoyed by IFC). It also utilises the A/B loan structure which was pioneered by the IFC (see above).

EBRD has a lot of experience of multi-source financing, lending alongside ECAs and/or other commercial lenders. EBRD involvement will usually increase the attractiveness of a project to an ECA as EBRD is often prepared to take on significant project risk. Furthermore EBRD is willing to structure its repayment schedule to suit ECAs.

## 9.12 European Investment Bank (EIB)

The EIB was set up in 1958 under Article 129 of the Treaty of Rome. Its role is to “contribute ... to the balanced and steady development of the common market in the interests of the Community” by facilitating the financing of certain types of project. These projects include those which assist less-developed regions, the modernisation of undertakings and projects which are of common interest to several member states and cannot be financed otherwise (e.g. Channel Tunnel).

A big advantage of EIB involvement in a project is that EIB can provide long-term fixed rate funding. EIB will consider maturities of 25 years and more. EIB funds itself relatively cheaply in the international bond markets due to its credit standing. It is, therefore, able to offer borrowers long-term fixed rate funding by charging a margin on its own cost of funds. This margin will include an element of profit and a further element to cover its statutory reserves. EIB can also offer more traditional floating rate loans and hybrid loans where the rate is fixed for a period and may then be floating for a further period.

EIB will typically lend directly to the borrower; however, in some jurisdictions it may prefer to lend to a bank which then on-lends the funds.

EIB does not usually accept completion risk in a project financing. However, the borrower may still wish to benefit from EIB funding throughout both the construction and operation phases of the project. This is achieved by providing EIB with bank guarantees or a standby letter of credit from a syndicate of commercial banks during the construction phase. This structure will result in the bank syndicate taking the completion risk. EIB will usually be prepared to assume post-completion risk. Although it may be possible to achieve this by the release by EIB of all the bank guarantees and letters of credit on completion it is more likely that EIB will release the bank guarantees and letters of credit following completion on a phased basis subject to periodic compliance with cover ratio tests.

## 9.13 Asian Development Bank (ADB)

The ADB was founded in 1966 with the purpose of promoting the social and economic progress of the developing member countries in the region by lending funds and providing technical assistance. The bank's operations are based on detailed studies which determine the needs of the relevant country. The bank will lend to private sector projects so long as the project is intended to create jobs or otherwise positively affect the relevant country's economy. Whilst it will generally expect its loans to be guaranteed by the relevant host government, it will lend to projects which provide essential items or services without sovereign guarantee backing. Its two largest shareholders are Japan and the US followed by the People's Republic of China, India and Australia. In 2001 India was the largest borrower from the bank with 28.1 per cent of the loans by value. Like EBRD, ADB seeks to act as a catalyst to draw private funds into the region. In 2001, ADB provided loans totalling US \$5.3 billion. ADB does not seek to compete with commercial banks and, to some extent, acts as a lender of last resort.

## 9.14 Commonwealth Development Corporation Group Plc (CDC Group Plc)

CDC Group Plc was originally established as the Commonwealth Development Corporation by Act of Parliament in 1948 (then supplemented by a further Act of Parliament in 1978) to create long-term, self-sustainable business in the less developed countries of the world. Despite its development role, it does seek a commercial return on its investments. PFI for central government in the UK is now promoted using a public/private partnership (PPP). In line with becoming a public private partnership, CDC Group Plc was transferred in December 1999 to a public limited company. At a later stage, CDC Group Plc plans to become a public private partnership with the government retaining a significant minority shareholding.

As at 31 December 2001, CDC had £805 million invested in over 400 businesses in 54 countries. Activities include power, transport, telecommunications, retail, IT, property and mining. It has a network of offices around the world situated throughout sub-Saharan Africa, Southeast Asia, the Pacific Islands and the Americas.

## 9.15 Intercreditor Issues in Multi-Source Project Finance

### Complexity of Intercreditor Issues

Project sponsors, borrowers and financiers should not underestimate the problems which may arise when dealing with the varying interests of the different classes of financier in a project financing. These issues usually take a great deal of time to resolve and can contribute significantly to the costs of a transaction. All parties in a project financing are best advised to address the intercreditor issues as early as possible in order to minimise the risk of financial close being delayed by these issues.

Large projects with significant financing requirements need multiple sources of financing. In recent years such sources of finance have included:

- “traditional” senior debt project finance loans provided by commercial banks
- Bonds (with or without a monoline insurer)
- Export credit agencies
- International or regional development banks
- Equipment leasing
- Mezzanine debt (akin to the leveraged buy-out market)
- Providers of interest and currency swaps and other hedging instruments
- shareholders/sponsor loans.

Each class of financier will have different interests and priorities which will need to be reconciled in order to produce a complete financing package for the borrower/project company. In addition, it is not unusual for some sources of finance to be put in place following financial close (especially for a bond or lease financing). It is difficult to anticipate the requirements of a subsequent class of financiers and therefore intercreditor arrangements may need to be sufficiently flexible to allow for subsequent variation to accommodate a further tranche of finance.

### Typical Intercreditor Issues

There are seven main categories of issue:

- (1) Order of drawdown of funds
- (2) Maturities of the differing classes of finance
- (3) Priority of distribution of project revenues to the various classes of financier
- (4) Restrictions on financiers amending the terms of their own financing documents
- (5) Voting powers for waivers and amendments to financing documents and intercreditor arrangements
- (6) Who has the right to accelerate loans and to control the enforcement of security
- (7) Priority of distribution of the proceeds of enforcement of security.

### Common Terms Agreement

The common terms agreement is the preferred method of documenting a multi-source project. It is an agreement

between the borrower/project company, all classes of financier, the agents, the security trustee and (usually) an intercreditor agent (acting for each class of financier). The document will set out common terms which apply to each class of debt finance and will usually contain provisions dealing with the following areas:

- Definitions
- Conditions precedent
- Drawdown mechanism for all facilities, including the order of drawdown of the separate facilities
- Representations, covenants and events of default
- Financial and project information, budgets and financial projections
- Insurance
- Project accounts including the order of disbursement to the varying classes of creditor
- General agency and account bank provisions
- Intercreditor provisions dealing with the issues outlined in paragraphs (1) – (7) above.

There will still be a loan agreement for each facility but it will only deal with the unique aspects of that facility (for example, the principal amount, interest rate, fees and repayment terms). Where an ECA is involved the facility agreement may not even be in English or governed by the same law as the common terms agreement. However, this is less of a concern as the important provisions are contained in the common terms agreement. The common terms agreement will typically be governed by English or New York law.

The common terms agreement is often driven by the sponsors in order to simplify complex financing terms and intercreditor arrangements and to facilitate financial close. In addition, where there is a common terms agreement it is more difficult for each class of financier to justify having separate legal representation, insurance and other technical advisers and so can reduce the borrower/project companies' costs.

If a refinancing or a further round of financing is anticipated the common terms agreement may need to provide for subsequent amendments to be made to the document.

## Hedging Instruments

It is usual for most project companies/borrowers to enter into hedging arrangements (in respect of interest rate or currency exposure or both). The swap bank will want its exposure under the hedging arrangements to be secured. In addition, the banks will want the hedging arrangements to remain in place until all facilities are accelerated. It is usual for it to be a requirement that the swap bank be a member of the lending syndicate. The usual intercreditor arrangements will provide that payments to swap counterparties will rank equally on enforcement. The swap counterparty will receive no voting rights (however it can exercise its voting rights as a bank). The termination events in a standard ISDA Master Agreement will be amended to provide for cross-acceleration, rather than cross-default.

