industry, and identity of the sponsors, and if applicable the procuring government authority, will also be relevant. The most common source of project financing is the commercial bank market, providing senior limited recourse debt to a wide array of projects and sectors across the globe. By contrast, the use of mezzanine and subordinated debt sourced externally, from non-sponsors, remains comparatively rare in project finance funding plans. The use of international and domestic capital markets has been cyclical and in recent years adversely affected by the decline in the monoline insurers.

3.12 Public sector lenders in the form of multilateral, development, and bilateral agencies have long been the key-stone for project financing in developing, countries, where their participation is necessary to mitigate political risks and facilitate access to other forms of co-financing. Export credit agencies (ECA) have provided a deep-pocket, whether in the form of financing which is 'tied' to the export of goods and services from the country of the ECA, or the greater debt funding capacity of their 'untied' loan programmes.[1] However, consideration is first given to the ground layer of the capital structure, the equity or equity equivalent funding of the commercial project participants, the sponsors.

Equity

3.13 Sponsors wish to maximize their profits. However, as discussed in Chapter 2, the methods of achieving a return and the economic interests for participating in a project may be far wider than can be demonstrated by a simple calculation of the projected dividend profile over the life of the project.

3.14 In terms of equity capital, lenders typically require a sponsor or a third-party equity participant (such as an equipment supplier or operator) to contribute a meaningful portion of the capital invested in the project. The level of equity capital is normally driven by the expectations of the project finance market for the relevant sector, and the debt capacity of the projected cashflow of the project. There is a balancing exercise to be performed. As the relative amount of the equity contribution decreases, the rate of return on the equity investment will rise, but the increase in the aggregate debt requirement will affect the project's debt service coverage ratios. For lenders, the injection of equity capital is often perceived to be the investors' commitment to the project through any difficulties that it may encounter. Even when a project's modelled cashflow is strong enough to suggest that the funding could be 100 per cent debt, it is unusual (depending on the quality of the project and the relevant industrial sector) to see projects without a contribution of capital from the equity investors ranging from 10 per cent to 40 per cent of the capital cost.

[1] An explanation of the funding programmes of export credit agencies and multilateral development banks can be found in Chapter 8.

Equity investors often prefer to defer making equity contributions until as late as possible in order to enhance their return on equity. During the construction period of a green-field project, the lenders may permit pro rata drawdown of debt and equity according to the debt-to-equity ratio, or less commonly, agree to back-end the equity until the senior debt has been fully funded. Senior lenders typically require that any deferred funding of the equity portion of the capital costs will be accelerated if an event of default occurs under the senior financing documents. Credit enhancement in the form of a parent guarantee or letter of credit may be required to support the investors' deferred equity funding obligation. **3.15**

Equity bridge loans

Sponsors may opt to meet their equity funding obligations by way of debt financing. This is known as an equity bridge financing, which has become relatively common in certain markets, particularly the Middle Eastern power market. The loans are typically provided by commercial bank lenders backed by the balance sheets of the sponsors through the provision of sponsor guarantees of the loans on a several basis. The equity bridge loans are commonly funded in one or more draws of debt prior to the funding of the project loans and repaid by the sponsors' equity contributions at the end of the construction period, or if earlier, an agreed long-stop date. At the project level, the loans replace the initial equity investment funding obligations of the sponsors and are designed as a method of improving the equity internal rate of return. Such arrangements are acceptable to the senior lenders if appropriate subordination arrangements are put in place and the equity bridge lenders will need to satisfy themselves that there is sufficient credit behind the guarantee of the relevant shareholder's equity contribution (which will be used to repay the loan). A second ranking security interest over the project assets may be permitted by the senior lenders but the credit for the equity bridge loans is grounded in the sponsor's corporate guarantee. **3.16**

Subordinated shareholder debt

Subordinated shareholder debt may serve as an alternative or a supplement to equity funding of the sponsors' contributions. Sponsors may prefer to make their contributions primarily in debt, rather than equity, for tax and corporate finance reasons. **3.17**

The advantages of debt instruments over equity, subject to local legal considerations, are that: **3.18**

(1) debt can be secured (subject to the senior lenders' priority) and therefore rank ahead of unsecured creditors (subject to the application of doctrines of equitable subordination, which in certain circumstances may, as a matter of the law of some jurisdictions, subordinate debt held by shareholders to third-party claims);

(2) the interest thereon (unlike dividends payable in respect of shares) may be tax deductible;
(3) whilst corporate law often restricts the redemption of share capital, it is unlikely to hinder the repayment of debt; and
(4) as debt, the borrowed amount will eventually be repaid if the project is successful, without tax consequences, whereas a repayment of capital may be more complex from a corporate and tax standpoint.

3.19 If subordinated debt is to be contributed, senior lenders generally will require intercreditor documentation or a subordination agreement with the providers of the debt to address a number of issues and, in particular, to ensure that:

(1) both the subordinated debt and any security for it are subordinated;
(2) the subordinated creditor's rights of acceleration and enforcement are restricted;
(3) the senior lenders are allowed to advance prior ranking new money if required to address the project's capital requirements;
(4) the senior lenders are permitted to amend their credit agreement and restructure the senior debt without the approval of the subordinated lenders;
(5) the subordinated lenders will agree not to institute insolvency proceedings against the project company; and
(6) the subordinated lenders will agree to cooperate with the senior lenders in any foreclosure or private sale.

Mezzanine debt

3.20 Mezzanine debt provided by third-party, non-equity investors at a higher rate of interest is not a common feature of project finance transactions, but the tightening of liquidity in debt markets following the events of 2008 prompted its appearance in some financing plans. It can be used as a layer of finance between the equity/deeply subordinated debt of the sponsors and senior debt in the capital structure of a project company. Sponsors may look to mezzanine finance to fill a 'financing gap' caused by a shortfall in the amount of senior debt that is available and in the amount of equity that can be raised, or as a way of increasing the leverage of debt to equity. Mezzanine lenders, because they will take and are being remunerated for a greater level of risk, will generally require lower financial cover ratios to be met. This allows an increase in the debt capacity of the project. The project company will have to pay a higher interest rate to compensate the mezzanine lender for its subordination to the senior debt and the mezzanine lender's agreement to finance on comparatively less onerous terms. Mezzanine lenders to project finance transactions expect, at a minimum, consistent interest payments and to share in the security package with the senior debt, but on a subordinated basis. In addition to a relatively high interest rate, the remuneration offered to a mezzanine lender may include an 'up-side' incentive to make a financing sufficiently attractive. Such incentives may be in the form of equity related sweeteners, such as the issuance of cheap stock to the

mezzanine lender at the time of the loan, warrants to purchase stock, or rights to call or convert debt to equity at reasonable prices, allowing for up-side potential.

3.21 The 'depth' of subordination for both subordinated and mezzanine debt may vary. On the one hand, there can be absolute subordination, which precludes, or at least subjects to specific conditions, all payments of principal and interest so long as senior debt is outstanding. This type of debt is generally issued to the sponsors and termed 'deeply subordinated debt'. At the other extreme is subordination that is triggered solely by a bankruptcy proceeding. Between these extremes, there is a wide range of options.

Bank debt

3.22 Infrastructure projects have traditionally been financed in the commercial bank market, and commercial banks continue to be the main source of project finance debt. In part, this is because commercial banks have substantial experience and appetite for cross-border financings, funding flexibility to manage construction drawdown schedules and multi-currency draws, and the capability to be a positive and responsive force in working with the sponsors to respond to unexpected events affecting a project. The approach of commercial banks is not so different from that in any other form of financing. Many of the large international commercial banks employ a staff of industry and regional experts as well as experienced project financiers. They have the capacity to understand the norms in the industry and appraise the credit risk exposures involved in unusual loan transactions.

3.23 Commercial bank loans to a project may involve a single lender, but more typically, involve several lenders in a 'club' deal or the loans may be syndicated by one or more arrangers chosen by the sponsors. Project loans are often traded and participated widely, and a number of leading banks have sought to securitize their project loan portfolios. As a result, during the term of the loan the parties exercising voting rights may differ from those who made the original commitment.

3.24 Commercial bank loans may take a variety of forms, such as construction, term or working capital facilities. The maturity of a term loan rarely exceeds fifteen years, although this may vary from transaction to transaction.[2] Long tenors are less likely to be achievable for riskier projects located in challenging jurisdictions. The loans are generally priced with floating interest rates based on LIBOR (the London Interbank Offered Rate) for US Dollar or Sterling-denominated loans, EURIBOR (the Euro Interbank Offered Rate) for Euro-denominated loans, or similar indices for Yen and other currencies. These interest rate indices are widely used in the syndicated loan markets on the assumption that they approximate most banks' cost of

[2] Longer tenors of twenty to twenty-five years have been seen in certain UK PFI projects and tenors of up to twenty years or more were achieved prior to 2008 in certain Middle East power projects.

funding the loans. At times when this assumption is untrue, for example, during financial crises, a customary 'market disruption' clause, which is aimed at ensuring that banks can recover their actual cost of funds, becomes relevant. By comparison, the international bond markets issue and deal predominantly in fixed rate instruments. Commercial banks are required to maintain unallocated capital in reserve against loan exposures, and the ability of banks to extend loans may over time be impaired by increasing capital reserve requirements imposed by central banks and other regulators. The capacity of individual banks may be further affected by that bank's internal country limits or portfolio limits, for example, limits on aggregate exposure to a particular industry sector in the form of limited recourse debt.

3.25 The appetite and experience of international commercial banks to finance a project will in part be determined by the geographical location of the project and their experience in that jurisdiction, the relevant industry, and their relationship with the sponsors. In developing countries, international commercial banks may require political, and sometimes a level of commercial risk coverage provided by the insurance policies of public funding agencies such as ECAs. In such developing countries, local banks are likely to figure prominently in the financing plan. Local banks can play an important role in mitigating certain risks by providing local participation, knowledge of the regulatory system and political environment and local currency financing to provide a natural hedge to currency exposure in the project (for example, a power project in a developing market where the power off-taker has to match its payment obligations with its local currency receipts, but the construction costs and bulk of the financing is denominated in US dollars).

3.26 Commercial banks, whether international or domestic, also often participate in project financings as providers of hedging products. To limit a project's exposure to the risk, for example, of changes in underlying interest rates, the project company may enter into an interest rate swap, cap, collar, or other hedging agreement. Similar hedging arrangements may be put in place to address currency, commodity price, and other risks. The hedging banks' exposure under these arrangements if they were to terminate prior to their term (for example, upon the insolvency of the project company) may be significant, and they will usually require that exposure to be secured *pari passu* with the senior debt.

Islamic project finance

3.27 More than one-fifth of the world's population practices the Islamic faith. In conjunction with the rapid growth in the wealth of many predominantly Muslim Middle Eastern and Asian countries, the project finance market has been affected by an increasing amount of funds from Islamic state-owned investment funds, Islamic financial institutions, and individual Muslims who desire to conduct their commercial and financial activities in accordance with Islamic law. With this increase, Islamic finance has moved from the niche to the mainstream in many

project finance markets, particularly in the Middle East, but also in Malaysia and Pakistan.[3]

Capital markets

3.28 As discussed in Chapter 9, additional debt financing for a project may be obtained in the bond market. Projects have long accessed the bond and commercial paper markets. Standard & Poor's, Moody's and other credit rating agencies regularly rate debt issues by projects. Rating agencies have published details of the criteria they use to rate power and other projects, which are very similar to those used by commercial banks in making their own credit assessments. This significantly expands the sources of capital available to projects by encouraging the participation of investors whose objective is to hold a portfolio of assets without necessarily having to undertake significant due diligence on each investment. Due to the documentary and regulatory burden in effecting a bond issue, its inclusion in a financing plan will commonly be limited to occasions when the cost of funds is significantly lower than the commercial debt market or the search for financing requires that the pool of potential investors has to be as wide as possible.

3.29 The investment requirements of insurance companies, pension and mutual funds, who often invest through the capital markets, create a deep pool of capital seeking long-term, fixed income assets. Although to date, the vast majority of project bonds have been placed in the US, issuances have also been placed in the European, Asian, and Middle Eastern markets. The participation by a monoline credit insurer in project bond issuances may in some cases enhance access to the market (although these institutions have of late been much less active). A number of government export credit and other official credit agencies have also proposed project bond credit enhancement programmes to help fill the resulting void.

3.30 The capital markets have demonstrated an ability to provide attractive economics for project financings. Sponsors can more closely match the anticipated life of a project's cashflows using the longer tenors typically available in the bond markets. Sponsors are also attracted by fixed interest rates and the generally less restrictive covenant packages available in the bond market. Large amounts of debt can be raised in a short period of time by relying on exemptions in the US and European securities laws that permit direct sales to institutional investors without a formal regulatory registration process. The capital markets therefore represent a source of funds that, for a project which is properly evaluated and structured, can be competitive with alternative funding sources.

[3] A more detailed explanation of the practices and techniques of Islamic finance relating to projects can be found in Chapter 10.

3.31 The depth of the market for a project bond issuance depends in large part on the credit rating given to that issuance. Most issuers seek to achieve an 'investment grade' rating, which is the minimum required level to allow many classes of investors to acquire the bonds. This can be particularly challenging if the sovereign rating of the host country lies below that level. Thus, it is generally only the strongest projects that have ready access to the capital markets. From time to time, market disruptions have resulted in project bond spreads widening and several issues being downgraded, with a number of potential bond deals being cancelled or pushed back to the bank market. Yet, the long-term rationale for using project bonds persists for sponsors that can address the potential structural difficulties of travelling down the capital markets route, some of which are discussed below.

Disclosure

3.32 Securities laws in jurisdictions where project bonds may be sold often require the disclosure, or even display for public inspection, of the material terms of projects agreements. Sponsors and third parties to project agreements may object to disclosure of information they consider to be commercially sensitive.

Waivers and amendments

3.33 Identifying and coordinating all of the bondholders when necessary for consents or waivers can be a challenge if the bonds are widely held. Thus, bond covenants are generally 'looser' than bank covenants, and waivers may automatically be made available where the issuer obtains an affirmation of its credit rating or (in some cases) certifies that the circumstances for which a waiver is sought do not have a material impact on its business or financial projection.

Intercreditor issues

3.34 Integration of a capital markets bond financing for a project with traditional bank debt can present challenges with respect to competing intercreditor interests, particularly in 'work-out' scenarios. Project participants will often find themselves grappling with questions, such as whether credit classes can vote separately in order to exercise remedies and whether all classes should benefit from the same covenants and events of default. However, with the expansion in the number of financings combining both commercial bank and capital markets (and even ECA and Islamic) tranches of debt, there is an emerging consensus as to how these issues should be addressed.

Financing commitment

3.35 The absence of a firm financing commitment by an underwriter up until the time the bond offering is actually priced can be a source of significant uncertainty.

Negative arbitrage

3.36 Capital markets debt, if issued during construction, is generally funded in a single issuance and deposited into an escrow or similar account until required to fund

project costs. Interest will accrue on the bonds from the date of issue at a rate which is unlikely to be offset fully by earnings on the escrowed deposit. This is sometimes referred to as 'cost of carry' or 'negative arbitrage'. Thus, capital markets debt may most efficiently be used at a time when proceeds can be applied to significant outstanding project costs or to refinance other debt.

One-time funds

3.37 Capital markets are utilized and investors procured on a one-off basis. If arrangers of a bond issue agree to arrange a sequential bond issue programme for an issuer, they will do so on an uncommitted basis which is impractical for a project financing unless backed-up by availability of commercial bank debt or implemented as a refinancing of commercial bank debt. The one-time receipt of funds is in contrast to the bank loan market where amounts are drawn over an availability period which in project finance can last a number of years.

Public sector lenders in project financings

3.38 The public sector funding sources that provide support to energy, mining, manufacturing, and infrastructure projects around the world comprise four basic categories:

(1) export credit agencies and export and investment insurance agencies;
(2) multilateral agencies;
(3) bilateral and development finance agencies; and
(4) domestic agencies.

3.39 Although there are similarities in the agencies' application of credit analysis for project financing transactions, the differing development goals of the agencies create unique considerations when contemplating the funding sources for a project.

Export credit finance

3.40 Export credit agencies and investment insurance agencies, commonly known as ECAs, are typically governmental or quasi-governmental institutions in a variety of guises. Each ECA has a broadly similar objective which is to promote the interests of exporters of goods and services from its home jurisdiction to international markets through the provision of one or more of government-backed loans, guarantees, credits, and insurance. It is the ECAs' primary objective to provide direct support for the national interests of their home countries, which clearly distinguishes them from multilateral financing agencies.

3.41 Energy, mining, manufacturing, and infrastructure-related investment in some of the less developed regions of the world entail particular political risks that impair the access of these projects to the international capital and commercial debt markets. One of the primary attractions of using ECAs as a funding source is that

with their access to diplomatic channels, they are well placed to mitigate certain risks of this nature and thereby facilitate the investment of commercial debt on a co-financing basis. If the project involves the sale of goods and services from the country of origin to a foreign market (or in some cases as further discussed below, the promotion of 'untied' financial investment), the project may satisfy the requirements for ECA participation. Traditionally, the principal cover available to debt and equity investors from export credit agencies has been against political risk; however, most export credit agencies are also prepared to provide more comprehensive guarantees and in some cases, to make direct loans to project companies.

3.42 The slate of products provided by an ECA varies according to the regulations applicable to that ECA, the sector, the structure of the investment and financing, and the country in which the project is located. Typical products include political risk insurance/guarantees, commercial risk insurances/guarantees, interest rate support, and for some ECAs, direct lending on both a 'tied' and 'untied' basis as further described in Chapter 8.

3.43 Within the project finance market, the active ECAs of recent years have included the Export-Import Bank of the United States (US Exim) of the US; Japan Bank for International Cooperation (JBIC) and Nippon Export and Investment Insurance (NEXI) of Japan; Export-Import Bank of Korea (K-Exim) and Korea Trade Insurance Corporation (K-sure) of Korea; COFACE and Direction des Relations Economiques Extérieures of France; Euler Hermes Kreditversicherungs-AG (Hermes) and KfW and its subsidiary IPEX Bank in Germany; and Servizi Assicurativi del Commercio Estero (SACE S.p.A. or simply SACE) of Italy. There is an expectation that non-OECD ECAs, such as the Chinese ECAs, namely the Export Import Bank of China, and China Export & Credit Insurance Corporation (SINOSURE), will increasingly play a more central role in financing, and co-financing with other ECAs, developing country transactions on a project finance basis.

3.44 In addition to the governmental or quasi-governmental export insurance market, there is also a vibrant private export insurance market. The private market is a less liquid market and sponsors may find that sufficient coverage for a commercially acceptable price and tenor may not be available for certain developing country markets.

Multilateral agencies and development finance institutions

3.45 When political risks are significant, or if export content may be insufficient for ECA financing, multilateral or similar regional or national development banks may be instrumental to a sponsor in completing a financing. The social and economic development goals of these agencies may allow them to provide funds when other lenders and investors will not. It is common for these institutions to be 'path-finders' in that they finance the first deals of their kind deals in challenging investment locations.

3.46 Multilateral institutions have as one of their primary purposes lending money to projects located in the emerging markets. Promoting development and helping host governments legislate in order to create a base of corporate, taxation, and investor laws and regulations to foster international investments are core goals of these institutions. In the project finance context, these development goals do not necessarily mean that the financial terms of the debt offered by these institutions will be on particularly subsidized terms. Development agencies, such as Netherlands Development Finance Company (FMO), Promotion et Participation pour la Coopération Économique (Proparco), German Investment Corporation (DEG) tend to focus their financing in certain regions and like multilateral agencies are capable of participating in many different roles and often in a combination of roles (for example, adviser, equity provider, subordinated/mezzanine debt provider, and senior lender).

3.47 In project finance, the participating members of the World Bank group include the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA), which, unlike the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA), extend credit principally to non-sovereign borrowers. The IFC promotes growth in the private sector of the economies of developing countries by mobilizing domestic and foreign capital and making loans to private corporations that have projects in such countries. Unlike the World Bank, the IFC does not require direct state support. MIGA provides guarantees against losses caused by non-commercial risks, including currency transfer restrictions, expropriation, war and civil disturbances, and, in same cases, breach of contract.

3.48 Other multilateral agencies have similar mandates at the regional level. For example, the European Investment Bank, the African Development Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank, and the Asian Development Bank each make loans and equity investments and provide technical assistance within the regions to which their respective missions extend. Various individual countries have formed development finance institutions that also regularly participate in private sector financings.

3.49 Co-financings of loans among commercial banks and multilateral agencies have become standard. The IFC, for example, will in effect syndicate a portion of its loan exposure to commercial banks under its A/B loan structure. In other cases, multilateral agencies and commercial banks will lend side by side. A multilateral lender may not require separate security, but may impose a strict negative pledge and usually will demand to share the benefit of any security taken by the commercial lenders. Further, as in ECA financings, the project may be subject to strict environmental impact assessments and projects must comply with specified guidelines.

3.50 Although commercial bank lenders may take substantial comfort from the participation of multilateral lending institutions in projects, explicit provisions in the

documentation often exclude any inference that the World Bank, MIGA, IFC, or other co-financing agency is acting in a governmental capacity. Indeed, it is likely that commercial banks involved in the project will be required specifically to acknowledge that they have entered into the transaction exercising their own credit judgement and without reliance on the decisions taken by the co-financing agency (similar to the acknowledgement given by the participating banks to an agent bank). Any responsibility or duty on the part of the multilateral agency to the commercial banks is excluded, except for those responsibilities that are expressly set out in the documents.

3.51 For a sponsor, a multilateral or development agency loan may have certain advantages:

(1) As with ECAs, the interest rates tend to be competitive and fixed interest rates may be possible.
(2) The tenor of the financing may be longer than might otherwise be available from the commercial bank market.
(3) The participation of these institutions endorses the credit for other potential lenders and may be a prerequisite for accessing other sources of funds, particularly in jurisdictions with a limited track-record for foreign investment and successful project financing.
(4) A co-financing or complementary financing may be possible with commercial banks.
(5) Funding multiple layers of the capital structure may be possible.
(6) It is generally perceived that these institutions are likely to work with the sponsors to rectify problems in the project as opposed to enforcing over the collateral.

3.52 When considering this source of funding, sponsors need to be mindful of:

(1) the strict compliance required in the fields of environmental and social regulations and non-corrupt practices; and
(2) the potential intercreditor challenges which may be generated by the different policy goals and status of these institutions.

Leveraged and finance lease arrangements

3.53 If a project company or its sponsors cannot utilize the particular tax benefits derived from ownership of the project assets, the financing may be structured as a traditional leveraged lease. Under a lease structure, an equity investor holds legal and tax ownership of the project and leases it to the project company. This structure separates ownership of the project for tax purposes from control over it, thereby enabling the project company to reduce its cost of capital by, in effect, transferring tax benefits to an equity investor. The project company, as lessee of the project, retains the right to the residual cashflow from the project during the term of the lease, after

provision for lease rental payments. The lessee often negotiates a purchase option at the conclusion of the lease term.

3.54 The typical lessor in a leveraged lease becomes the owner of the leased equipment by providing a minority percentage of the capital necessary to purchase the equipment. The lessor borrows, on a non/limited recourse basis, the remainder of the capital and to secure the loan, a first priority collateral interest is provided to the financier over the lease, the lease rental payments, and the equipment. The amortization of the debt will be based off the lease term and principal and interest shall coincide with the rental payments. The intent of a leveraged lease is that the lessor can claim the tax benefits of the leased asset and the residual value notwithstanding that it is providing a certain minority percentage of the capital.

Letters of Intent, Term Sheets, Commitment Letters, and Mandate Letters

Showing interest without a commitment—the letter of intent

3.55 A letter of intent (LOI) provides a sponsor with an initial indication of whether a lender is interested in the project based on the terms proposed by the sponsor. An LOI may be an alternative to procuring a legal commitment to provide financing, or a precursor to agreeing a more detailed and legally binding commitment in the form of a commitment letter or mandate letter.

3.56 Whether an LOI is perceived to provide value will depend on the preferences of the project participants. An LOI may be procured for a number of purposes, for example:

(1) as a type of preliminary loan application, where the sponsor and the lender agree on the basic terms for a financing and the sponsor wishes to formalize the expression of interest through an LOI;[4]
(2) to provide evidence to a procuring state authority or other project participants that financing for the project will be available; and
(3) an LOI may be the only form of commitment a financial institution is capable of providing at an early stage in the development of the funding plan, for example, commitments provided by ECAs and development agencies tend to be in the form of a non-legally binding LOI.

3.57 The commercial comfort a sponsor may take from receiving an LOI will vary according to the type and reputation of the lender, the relationship between the lender and the sponsor, and the internal approval process and due diligence that has

[4] The commercial assumption may be that the signing of an LOI implies a moderately higher level of internal approval than would otherwise be the case.

been conducted by the lender prior to the issuance of the LOI. For example, many ECAs only issue an LOI after a certain level of due diligence and a rigorous management approval process, so the fact that an LOI has been issued lends great credibility to a sponsor's expectation that financing will ultimately be available from that institution.

3.58 If an LOI references financing terms and conditions, it will start to look more similar to a commitment letter. The distinguishing factor is that, in an LOI, the lender does not, through the signing of the LOI, intend to legally commit itself to providing funds even on a conditional basis.

The term sheet

3.59 A term sheet provides the terms of the financing in a level of detail which is driven by its intended use, and the requirements and preferences of the lenders and the sponsors.

3.60 A term sheet has a number of uses:

(1) as a proposal of the sponsors to test the debt capacity of a project, whether as a stand-alone document or as part of a preliminary information memorandum (PIM) which will form the basis of a funding competition;[5]
(2) recording the terms and conditions of the financing for the purpose of preliminary approvals of the lenders; and
(3) it may form an attachment to a commitment letter or a mandate letter identifying the terms upon which a lender's commitment or obligation is based.

3.61 Unless the term sheet is a short-form commercial term sheet, the sponsors typically work in conjunction with their advisers, particularly their legal adviser, to prepare the first draft of a term sheet. Term sheets are not intended as legal commitments unless otherwise stated, or attached to a commitment or mandate letter as further discussed in the succeeding paragraphs below.

3.62 There is no firm requirement for a term sheet to be comprehensive (including, for example, fully drafted and exhaustive lists of conditions precedent, representations and warranties, covenants, and events of default).[6] The sponsors may wish to focus the potential lenders'/arranger's attention on the commercial terms and not attempt to assess competing mark-ups of detailed documentary points. However, a number

[5] A PIM is prepared by the lead sponsor often in conjunction with its financial and legal advisors and distributed to prospective arrangers or lenders as part of a funding competition. The contents of a PIM for a commercial bank project financing typically contains a description of the project and the key project agreements, an overview of the sector or market for the product, an indicative financing plan, a description of the borrower and the sponsors, and commonly contains an analysis of the risks and a set of financial projections.

[6] A checklist of conditions precedent, representations and warranties, covenants, and events of default typically found in term sheets is set out in Appendix 1.

of sponsors prefer to provide a detailed term sheet in order to streamline the preparation of the financing plan. To facilitate this strategy, the sponsors may pre-appoint lenders' advisers so that the form of term sheet circulated to prospective leaders is based on realistic commercial, legal and tax assumptions.

Commitment letters and mandate letters

3.63 Commitment and mandate letters record the relationship of the lender/arranger and the borrower/sponsors prior to signing the full-form financing documentation. In the case of many project financings, the selection of lenders and arrangers and agreement of terms is often organized as a competitive bidding process or series of bilateral negotiations with a number of competing financial institutions.

3.64 The terms of a lender's individual commitment to fund, and the terms in a mandate letter which require a lender to arrange or underwrite an amount in addition to the participation in the facility it intends to retain as its committed amount, will be a product of these negotiations. It is common in a bidding situation for a prospective lender/arranger to be asked to agree the material terms of the commitment or mandate letter in addition to providing its indicative financing terms based on the project and financial information supplied by the sponsors.

The commitment letter

3.65 A commitment letter is one form of document under which a lender makes a binding offer to its customer to lend money, subject to stated conditions. A commitment may be provided in a number of guises, and may be packaged with other material terms governing the relationship between the sponsors and a lender in the proposed project (for example, if the financial institution will also have a role as an underwriter or arranger of the facility, its commitment will commonly be packaged in the form of a mandate letter as discussed in paragraph 3.69 et seq below).

3.66 Not surprisingly, the key element in a commitment letter is the statement of a lender's commitment to provide a specified level of participation in a facility. The commitment will be conditional and should be read in conjunction with the conditions that apply. For project finance transactions, where the variables and due diligence are greater than a corporate financing transaction, a project lender may condition its commitment on the basis of further or full due diligence on the underlying project, and that the terms of the commitment are subject to change based on that due diligence and the negotiation of final loan and security documentation. In the commitment letter provisions, this expectation will be translated to the conditions to closing which govern whether, and if so, when, the lender is obliged to fund the relevant facilities. If the project company satisfies the conditions to the commitment, the lender is legally bound to close the financing. The sponsor's interest is in binding the lender to the stated commitment amount on the referenced terms. A description of frequently negotiated exclusions to a lender's commitment is provided in the discussion of mandate letters below.

3.67 The commercial terms of the proposed financing, together with the material representations, covenants, and events of default required in the definitive loan documentation are typically included, often by attaching a form of term sheet to the commitment letter. Many documentary provisions in project finance transactions are customary in nature, but the use of catch-all phrases, such as 'customary in a project financing', can result in subsequent disputes as parties may disagree as to what is actually customary, and it may unnecessarily lengthen future negotiations. The sponsors may be incentivized to provide a detailed term sheet and pre-packaged advisers' reports detailing the results of their due diligence in order to more securely bind a lender to its commitment.

3.68 One of the provisions will contain a date by which the terms of the commitment letter are required to be accepted by the project company, and an expiration date by which all of the lender's conditions to closing must be satisfied. If closing has not occurred by that date, the commitment obligations and the letter will terminate, and the lenders will have no further obligation, absent some action to the contrary, to continue to work towards a closing. From a lender's perspective, it is important for the commitment letter, or an ancillary fee letter, to provide that the lender's costs and expenses remain payable notwithstanding the cancellation of the commitment.

The mandate letter

3.69 As mentioned in the preceding section, a mandate letter records a legally binding relationship between an arranger and the project company/sponsors prior to signing the core financing documentation. A mandate letter has features not found in a commitment letter as the financial institution is agreeing to be responsible for syndicating a portion of the facilities, which may be on a 'best-efforts' basis or by way of an underwriting commitment to fund any participations left unsyndicated by a stated date. A combination of both concepts is also possible and may be termed a partially underwritten commitment.

3.70 The structure of a typical mandate letter would include some or all of the features mentioned in paragraphs 3.71–3.84 below.

3.71 The mandate letter will provide for appointment of, and for reasons primarily related to the marketing requirements of the relevant financial institutions, the title of the participants (for example, mandated lead arranger, underwriter, and bookrunner).

3.72 Any restrictions on the sponsors appointing, awarding titles to or agreeing to terms and fees with other financial institutions will be included. The arrangers will not want to expend time in furtherance of the financing plan if the sponsors have the ability to exclude them from the financing of the relevant facility. The arranger will also wish to ensure a level playing-field so that it is not disadvantaged when approaching the syndication market to find participants.

3.73 The obligations and levels of commitment the arranger assumes typically range from a 'best-efforts' commitment to arrange the syndication to a commitment to

fully underwrite the facilities and thereby assume the risk of having to take-up the unsyndicated funding commitment on its own balance sheet. The degree of commitment and the terms of any conditionality to those commitments are the fundamental provisions of the mandate letter.

3.74 If the facilities are underwritten, the portion which is underwritten will be stated. If the arranger is under a 'best-efforts' obligation, the intended hold amount of the arranger will be recorded, with the remainder made up of the portion of the facilities it is obliged to syndicate on a 'best-efforts' basis. In the wake of the financial crisis of 2008, the number of underwriting commitments in project finance transactions was dramatically reduced. This was a reflection of the lack of confidence of arrangers in their syndication capability at such time, due to the lack of new-lending and the limited liquidity in the secondary markets.

3.75 Any carve-outs to the commitment of the arranger will be recorded, including an exclusion if a material adverse change (MAC) occurs in relation to the project or the financial health of specified major project participants, or any MAC occurs in the relevant syndicated loan or other credit markets. As a key provision for negotiation in any commitment letter or mandate letter, the MAC clause is further considered in paragraph 3.85 et seq. A condition requiring the completion of full-form documentation is common, however, the sponsors will wish to confine its scope to completion of documentation on commercial and financial terms attached in the form of a term sheet to the mandate letter. Extending the conditionality to the satisfactory conclusion of due diligence is not uncommon but on its face, from a sponsor's perspective, provides an uncomfortably wide level of flexibility to the arrangers. Breaches by the project company or the sponsors of the material terms of the mandate letter is another customary condition which may give the arranger a right to terminate the mandate letter. Sponsors will be well advised to be as specific as possible as to the scope of the conditions; and may be incentivized to provide to prospective arrangers, pre-packaged due diligence reports from advisers appointed on behalf of the lenders. Whether the mandate letter is governed by English or New York law, prudent arrangers should not treat conditions expressed as 'completion of satisfactory due diligence' or 'subject to final board approvals' as unfettered rights to withdraw from their commitment.

3.76 Subject to the extremes of the financial markets, mandate letters for project financings commonly include 'market flex' terms, whereby the commercial pricing, and potentially other important terms of the financing, may be amended by the arranger to the extent necessary to achieve a successful syndication. Further discussion of market flex, together with an example of a lender's starting point for a market flex provision, is further considered below.[7]

[7] Market flex is discussed below in paragraph 3.101 et seq.

3.77 Clear market provisions are also a standard feature in a mandate letter and are designed to regulate competing approaches to the relevant debt market to raise finance which may adversely affect the chances of a successful syndication or increase the costs for an arranger to successfully syndicate its portion of the facility.

3.78 'Front-running' restrictions may apply so that each arranger agrees not to take actions to encourage any person to take an interest in the facilities prior to an agreed date in order that the arrangers' approach to the market is coordinated.

3.79 References to the obligation to pay costs, expenses, boiler plate language in respect of payments (including make-whole provisions in respect of taxes), and non-reliance provisions are also typically included in a mandate letter. The timing of payment of upfront fees in project finance transactions (which may be documented in a separate fee letter) is often an issue for discussion as sponsors usually prefer to delay payment from signing of the finance documentation to first drawdown. Arrangers commonly ask sponsors to credit-enhance the project company's obligation to pay fees (although not always successfully).

3.80 A non-disclosure provision is often included to prevent the project company from revealing the arranger's confidential pricing and terms.

3.81 Provisions regulating the process for the acceptance and allocation of participations may be included; however, in practice, an arranger will have a level of discretion in terms of the amount of the participations and distribution of a portion of its fees to other lenders who join in syndication.

3.82 The sponsors usually agree to assist the arranger with the preparation of any information memorandum which will be provided to potential syndicate participants, and to contribute management personnel and time to any syndication road-show, etc.

3.83 Representations are made by the sponsors as to the accuracy and completeness of the information provided, and an indemnity will be included, for the benefit of the arranger, against any liability or cost arising out of the arrangement, use of the facilities or entering into the mandate and financing documents.

3.84 Termination provisions are often negotiated in some depth and the arranger is usually able to terminate the letter if the project company and/or a sponsor has withheld information material to its decision to arrange, manage, or underwrite the facilities, or if a stated condition to its obligations is not achieved. The letter will terminate if the project company does not take up the offer by a stated date.

Material adverse change

3.85 A MAC clause may be required by a lender under a commitment letter, or by an arranger underwriting a commitment, so that it can decline to close the financing if a MAC occurs, or can renegotiate the terms of the financing. In the latter situation, there may be a certain amount of overlap with the market flex provision in a

mandate letter, however, the triggers for invoking the provision have subtle but important differences.

3.86 A MAC clause in the context of a commitment to participate or underwrite may, for discussion purposes, be divided into two, a business MAC and a market MAC:

(1) The business MAC focuses on:

(i) the financial health of the project company, and may extend to other major project participants, which will include the sponsors, contractors or offtakers, etc.;
(ii) the ability of the project to be constructed in accordance with the construction plan;
(iii) matters affecting the expected coverage under the financial ratios, key project documents or the available collateral package; and
(iv) the project itself.

(2) As the name implies, the market MAC looks primarily at adverse conditions in the relevant debt markets (and depending on the financing structure, the capital markets) and for projects in emerging markets, the ability of the relevant project company to continue accessing the international markets.

3.87 The interests of a lender in allowing flexibility not to fund or extract itself from its underwriting commitment are directly opposite to the interests of the sponsors in binding the lender to provide the conditionally committed financing.

A sample MAC clause

3.88 A typical London market lenders' starting point for a market and business MAC condition to a bank's commitment to arrange or underwrite a corporate financing might read as follows:

> The obligations of each Mandated Lead Arranger and each Bookrunner under the Mandate Documents are subject to the absence, in its opinion, of any event(s) or circumstance(s) (including any material adverse change or the continuation of any circumstance(s)) which, in its opinion, has (have) adversely affected or could adversely affect:
>
> (a) the business, condition (financial or otherwise), operations, performance, assets or prospects of [any Obligor] [since the date as at which [its latest / the latest consolidated] audited financial statements were prepared];
> (b) [the ability of the Company or any other Obligor to perform its obligations under any Mandate Document or Facility Document;] or
> (c) the international or any relevant domestic syndicated loan [, debt, bank, capital or equity] market(s) [which in the opinion of the relevant Bookrunner could prejudice Syndication], during the period from the date of [this letter / the Term Sheet] to the date of signing of the Facility Documents.[8]

[8] Sample taken from the Loan Markets Association form of mandate letter entitled, 'Mandate Letter—Best Endeavours'.

3.89 In the project financing context, paragraph (a) of each sample provision is commonly adapted to refer to the business and prospects set out in the Financial Model since the project company in a green-field development will be a special purpose vehicle with no trading history and limited assets.

3.90 A typical New York market lenders' starting point is similar:

> The arranger's commitment hereunder is subject to:
>
> (a) the absence of (A) any material adverse change in the [business, financial condition or operations][or prospects,] of the borrower since __, _____, and (B) any circumstance, change or condition (including the continuation of any existing condition) in the loan syndication, financial or capital markets generally that, in the judgment of the arranger, could reasonably be expected to materially impair syndication of the facility;
> (b) the accuracy and completeness of all representations that the borrower makes to the arranger and all information that the borrower furnishes to arranger; [and]
> (c) the borrower's compliance with the terms of this Commitment Letter, including, without limitation, the payment in full of all fees, expenses and other amounts payable under this Commitment Letter.

Issues for consideration

3.91 For a lender or an arranger, a key goal of the drafting of the conditionality to a commitment letter or mandate letter is to mitigate the risk that it may remain liable for its commitment in circumstances where it did not expect to be. Borrowers and sponsors are similarly incentivized to have predicable interpretation of the MAC provision to avoid unexpected losses of anticipated or underwritten funding commitments, and would commonly expend great effort in negotiating as narrow a definition as possible, particularly in underwritten financings.

3.92 Litigation in the US has provided lenders and underwriters with indications of the potential treatment by courts of MAC clauses, but there continues to be debate among market participants. Across the Atlantic, in England, there is limited judicial authority in the English courts which leaves a myriad of untested arguments potentially available to an aggrieved borrower.

3.93 Each sponsor and arranger will need to consider the matters mentioned in paragraphs 3.94 through 3.100 below.

3.94 How it wishes to treat pre-existing and known circumstances: absent specific drafting, it will be difficult for the arranger, and against the borrower's expectations, to invoke the condition on the basis of such adverse circumstances.

3.95 The intended criteria for determining whether a MAC has occurred, particularly in respect of known conditions, for example, if there is a pre-existing condition, is the commercial understanding that the materiality determination be made in the context of the state of the deteriorated market or business condition. It should also be

clarified whether only an incremental additional deterioration may be deemed material. For example:

> The arranger may not invoke this [MAC] paragraph solely with respect to event(s), development(s) or circumstance(s) which are generally known to be in existence on the date of this letter in the absence of any change (including worsening) therein,

or, the reverse:

> It is understood and agreed by each of the parties hereto that circumstance(s) and condition(s) in [state market conditions or business conditions] referred to above have deteriorated significantly prior to the date of this letter and that therefore even a small further change or worsening of such circumstance(s) or condition(s) or the occurrence of new event(s), development(s) or circumstance(s) that might not otherwise be regarded as materially and adversely affecting such markets could be materially adverse to such [state markets or business conditions] in the context of the transactions contemplated by this letter.

3.96 In many cases, at the time a commitment letter is signed, a bank does not expect to be able to withdraw its commitment on the basis of pre-existing circumstances, i.e. absent any adverse change. Accordingly, the other changes above to the MAC provision are designed to achieve a solution which may be acceptable to a borrower, whilst preserving the bank's rights in case of a further deterioration.

3.97 An arranger would commonly seek to extend the market MAC wording to contemplate adverse changes to the ability of that borrower to continue to access the international markets. For projects with a strong nexus to developing countries, an arranger may also suggest to the borrower that adverse changes in the political risks faced by the project in relevant countries can constitute a MAC.

3.98 For certain projects, an arranger may wish to specifically contemplate within the business MAC, adverse movements in the price of key supply materials or offtake prices, if supply and market price risk is not assumed by a participant other than the borrower; however, the borrower may argue this is already sufficiently addressed by the traditional business MAC wording.

3.99 In making a determination of whether a MAC has occurred, in the New York law context, a general duty of good faith is applicable which would not be imposed under English contract law. However, where a determination is crucial as to whether or not the bank will be obliged to perform its principal obligation, for example, under a commitment letter (i.e. to lend), an English court is likely to require that such a determination be made on a *bona fide* basis.

3.100 Parties should be aware of the potential for pre-contractual statements and negotiations about the MAC clause being relevant to a determination as to the invocation of the clause. An arranger may be well advised to consider a robust 'entire agreement' clause, for example:

> Subject to any fraudulent misrepresentation, the borrower acknowledges that it has not relied on, or been induced to enter into the Mandate Documents by, any

representation, warranty, collateral contract or other assurance other than those (if any) expressly set out in the Mandate Documents [and any other documents incorporated into the Mandate Documents] made by or on behalf of any other party before the date of the Mandate Documents. The borrower waives all rights and remedies that, but for this clause, might otherwise be available to it with respect to any such representation, warranty, collateral contract or other assurance.

Market flex provision

3.101 As pervades each aspect of the creation of the financing plan and the decisions to be made as to the sourcing of funds, the state of the financial markets, in this case the relevant syndicated debt market, has to a large part driven the acceptability of, and coverage of, market flex provisions in mandate letters. During the run up to the 2007/2008 crisis, arrangers' attention was focused on winning mandates in a very competitive lending market. The high levels of liquidity in the debt markets, including for project financed assets, allowed arrangers to gain favour with borrowers in bidding scenarios by pairing back or entirely deleting provisions designed to protect syndication strategies, including the market flex and clear market protections. The collapse in liquidity that followed the financial crisis resulted in lenders giving acute attention to these provisions. Market flex and clear market provisions, contemporaneous with a dearth of underwritten as opposed to 'best efforts' commitments, once again became embedded into mandates for international, and a large proportion of wholly domestic US and UK, project financings. Exceptions can be identified in the project finance market, but these tend to be only with respect to highly active, strong investment grade sponsors with an ability to bring to bear a wealth of corporate banking influence on their project finance banking relationships.

3.102 Whenever the economic background increases the likelihood of arrangers having to invoke market flex provisions due to thin syndication markets and unpredictable credit committees of potential lenders, sponsors and arrangers alike will focus great attention on the coverage of the provision. Although there are many forms of market flex provisions in use, a sample lenders' starting point assuming an arranging group may read as follows:

During the period from the date of [this letter / the Term Sheet] to the date, following close of Syndication, on which all the Syndication Lenders become party to the Facility Documents, the Majority Bookrunners shall be entitled, after consultation with the Mandated Lead Arrangers [and the Company] [for a maximum period of [ ] days], to change the pricing, terms and/or structure [(but not the total amount)] of the Facility/ies if the Majority Bookrunners determine that such changes are advisable in order to enhance the prospects of a successful Syndication.[9]

[9] Sample taken from the Loan Markets Association form of mandate letter entitled, 'Mandate Letter—Best Endeavours'.

3.103 A successful syndication will commonly be defined as the arranger achieving a stated amount of subscriptions or the underwriter reducing its participation to a pre-agreed level. The mandate letter should be clear whether syndication is a single-step syndication, or if more than one step, whether the syndication referred to is a primary syndication where additional co-arrangers will be added, or runs through to a general syndication to the initial lending base of the facility.

3.104 A number of themes in the negotiations are often encountered, in particular those mentioned in paragraphs 3.105–3.107 below.

3.105 Which parts of the commercial terms of the referenced facility are subject to 'flex'—a sponsor will prefer a narrow scope as by the end of primary syndication or general syndication, as the case may be, significant expenditure may have been incurred by the sponsor and there will be limited scope to renegotiate a reallocation of risk or pricing to any other project participant. Many sponsors will seek to clarify that neither the total amount of the facility nor the amount of on-balance sheet sponsor support can be amended since the total equity amount required and the extent of the balance sheet support for the limited recourse financing will be fundamental parts of their existing corporate authorities to continue with the transaction. The sponsors may negotiate to confine the application to 'pricing' flex, and perhaps within certain caps in order to avoid the erosion of the required return on equity of the sponsors. The ability to 'flex' the 'structure' will raise a concern from the sponsors that the required changes may unravel what is likely to be a highly structured risk allocation between the project participants. Amendments to the 'terms' raise the spectre for the sponsors that major commercial terms, such as the drawdown conditions, financial ratio coverage, amortization profile, reserve amounts, or conditions to releasing sponsor distributions, may change.

3.106 Whether it is a subjective determination of the arranger to invoke the clause, with or without consultation with the sponsors, or whether there is an objective element to the trigger right—unlike the MAC clause, it is unusual for an arranger to have to show an objective problem arising in the financial markets since the date of the commitment is given; if any reference is made to the state of the financial markets it will be to the 'condition' at such time, without requiring any comparative deterioration. A sponsor may feel aggrieved at this standard formulation if the arranger has been permitted to actively test the market appetite for the facility at the time of entering into the mandate, but the point is rarely conceded by an arranger who is seeking a requirement for market flex.

3.107 Whether the benchmark is a standard more challenging than 'advisable in order to enhance the prospects of a successful syndication'—it is rare for sponsors to persuade the arrange to materially raise this low and unspecific evidentiary hurdle.

3.108 The question as to whether a flex provision is included or not remains a matter of negotiation, however, the arranger will be well aware that the sponsors' expectation,

even if included, will be that the arranger would only call on the flex terms as a last resort. This will be particularly acute if the definition of successful syndication extends past the signing of the finance documents, which will commonly mean the vast majority of material project contracts will also have been finalized by virtue of their signing. Since the sponsors will have projected their own return on equity based on the debt terms committed by the arranger, it is not surprising that the sponsors will likely be resistant to attempts by the arranger to invoke a market flex provision.

4

PROJECT RISKS

John Dewar and Oliver Irwin, Milbank, Tweed, Hadley & McCloy LLP

General Overview

Introduction to project risks

4.01 The business of project financing is founded upon the identification, assessment, allocation, negotiation, and management of the risks associated with a particular project. Indeed, as project finance lenders look to the revenues generated by the operation of the financed project for the source of funds from which that financing will be repaid, the whole basis for project financing revolves around an understanding of the future project revenues and the impact of various risks upon them.

4.02 Projects face a variety of risks, and not all of these risks can be easily identified. One power developer has said that his projects, on average, are documented through 30,000 pages of tightly drawn contracts, but they inevitably face difficulties never contemplated by the draftsmen. Risk cannot always be mitigated or contracted away, but it can be assessed, allocated, and managed so that it is commercially reasonable. The first step is to identify the material risks and the second is to decide how they should be addressed.

Risk Identification—Due Diligence

4.03 A project's value is based principally on its ability to generate revenue during its operating phase. Therefore, both the sponsors and the lenders require assurances that the project is technically and economically feasible and that it will be built and operated according to the agreed specifications and in compliance with the laws and regulations of all relevant governmental authorities. This can be determined initially by having a competent technical adviser undertake a feasibility study. Such a study should address a number of issues, including:

(1) whether the facility can be constructed and operated within the projected budgets;
(2) whether the project company has the requisite skills and experience to operate and maintain the project;
(3) the acceptability of the facility site;
(4) the environmental and social impact of the project;
(5) the availability and cost of utilities such as gas, water, electricity, and waste treatment and disposal; and
(6) whether the project can meet the terms and conditions of operating licenses, environmental approvals, and construction permits.

4.04 The technical adviser is typically the primary consultant responsible for analysing the viability of design, engineering, and other related technical issues. It is not, however, the only expert whose opinion will be solicited. In the case of power plants, fuel consultants may assess the pricing and feasibility of the project's fuel supply and transportation arrangements. In the case of mining or oil and gas projects, experts may be called upon to assess the adequacy of dedicated resource reserves. Insurance, environmental, geotechnical, and, in some cases, security experts, among others, may also be called upon to address significant issues of concern to the lenders. Where the project's output is to be sold onto a market without the benefit of long-term sales contracts, an evaluation of the market projections by a qualified consultant may be required.[1] An auditor may also be retained to validate the project's Financial Model.

4.05 Legal counsel, often in conjunction with the technical and other advisers, will review the project's contractual structure to assess the proposed allocation among

[1] In the power sector, this would apply to uncontracted or part-contracted merchant power plants. Many petrochemical and refinery projects also sell their products through marketing agreements rather than firm off-take contracts. Some liquefied natural gas (LNG) projects sell their LNG under sale and purchase contracts which may provide for volume off-take, but pricing is linked to a gas market bench mark such as, in the US, Henry Hub. Concession based projects, such as certain toll roads, bridges, tunnels, and airports may also be heavily reliant on consumer linked demand for all or a proportion of their revenue stream.

the project's participants of the principal construction, operating, and other risks identified through the due diligence process and to identify the residual risks remaining with the project company.

4.06 The lenders will also conduct their own due diligence process, ensuring that such matters as their assessment of the credit standing of each key project participant or of the overall political risk associated with the project are properly considered.

General Issues For All Projects

Completion risk

4.07 Completion risk, also known as development, delay, cost-overrun, or construction risk, addresses the possibility that the project will not be constructed on time, on budget, or to the required specifications. A project finance lender's focus on completion risk is understandable, since the project company's cashflow is all (or predominantly) outgoing during the construction or pre-completion stage and its security over the project assets is of limited (or no) value before the project is completed.

4.08 The degree of completion risk inherent in a project is a function of three factors:

(1) the level of technical risk involved in the project (projects with simple and well-proven designs and technical requirements carry lower risks);
(2) the technical capability and financial strength of the construction contractor; and
(3) the level of guarantees and sureties provided by the construction contractor or other third parties and their respective capacity to perform under those obligations.

Construction contract structures

4.09 In a number of projects, completion risk is allocated to a contractor through a 'turnkey' construction contract. In such an agreement, the contractor undertakes to build a fully operational facility for a fixed (subject to limited exceptions) price by a specified date certain.

4.10 Where the market for construction work is competitive, with enormous costs and great attention to bidding detail, when tenders are called for projects, a pre-committed project financing package[2] will often be required by the relevant procuring authority. In many sectors a turnkey construction contract by itself will

[2] Bid packages submitted by sponsors to procuring authorities or utilities customarily include a complete technical package detailing the design and engineering specifications, full form project contracts or detailed term sheets and a fully (or as has been the case during the 'credit crunch') a partially underwritten financing of the project by the relevant lenders.

be accepted by banks for known sponsors, familiar equipment and systems, and safe locations without further sponsor support for delay or cost overruns.[3] These structures are commonly seen in the context of independent power projects (IPPs) and a number of public private partnerships (PPPs).

4.11 In many project financings, however, contractors are not willing to build projects on a turnkey basis at a commercially acceptable price because there may be too many risks (including the reliability of the local work force, 'local content' requirements, political instability, import restrictions and customs controls, or commodity price instability) to enable the contractor to have confidence that the project can be built for a specified price. In other projects, including in many process industries, the various components to be constructed are distinct, with significant differences in the required skills and technology, and thus no single contractor can provide the full range of technology or skills required to construct the project. In such instances, it may only be possible for a project financing to proceed with some form of completion support.[4]

4.12 Construction contracts should be structured to incentivize timely completion and include appropriate liquidated damages for delay. The construction expertise and credit quality of the main contractors will of course be an important factor in considering completion risk. Multinational scale of operating capacity (for large projects), previous experience with the technology and the type of project, as well as experience in the country where the project is located, are all desirable. 'Name' recognition will often play a large part in a project finance lender's assessment of completion risk. Certain construction companies (and sponsors) have excellent track records in project delivery and their involvement in a project will be likely to be regarded as lowering completion risk.[5]

Completion guarantees

4.13 To avoid the incurrence of a 'turnkey' premium that might render the project uneconomic, completion risk may be directly assumed by either the sponsors or a government entity (or both) through completion guarantees issued to the lenders. These guarantees may be limited to ensuring physical completion of the project or may extend, for example, to ensuring the maintenance of all financial projections at the time of completion, or even a full repayment of all project financing debt in the event completion is not achieved by an agreed date certain.

[3] For example, for over a decade, power and water procuring authorities in a number of countries have had great success in tendering for power and/or water desalination plants in the Middle East, Asia, Latin America, and elsewhere. These have included highly successful programmes tendered in Abu Dhabi, Saudi Arabia, Oman, and Bahrain.

[4] See para. 4.13.

[5] For more analysis of the participant risk associated with construction contracts, see Chapter 2 and for more analysis as to how completion risk may be allocated under a construction contract and the minimum requirements for construction contract bankability, see Chapter 5.

Delay risk

4.14 There are many factors that could delay the scheduled completion of a project, including the strength and experience of the contractors, the length of the projected construction period, the availability of building material and supplies, the terrain over which the project is being constructed, the risk of not receiving permits as and when required, the exposure to labour problems, the connection of required infrastructure, dispute resolution, and political risks. Many of these risk factors will also have cost implications for the project.

Cost overruns

4.15 In assessing the risk of compliance with the project budget and the incurrence of cost overruns, the project company may consider advance placement of orders for commodities necessary for construction (such as steel) or equipment which can lower the likely project costs, or even commodity hedging arrangements. In recent experience, commodity markets have been extremely volatile and these strategies can significantly reduce the risk of cost overruns where, for example, an engineering, procurement, and construction management (EPCM)[6] (rather than a turnkey) contracting structure is proposed. Similarly, to mitigate cost overrun risk, lenders may require that a certain amount of cost overrun support is procured by the project company either by way of allocated debt facilities and/or equity contribution commitments from the sponsors.

Technology risk

4.16 Technology risk will contribute to the overall matrix of both completion and operating risks. Problems with the application of the proposed technology during construction may contribute to delays in completion and, during operation, may result in lower performance, leading to diminished operational cashflows. The completion risk for projects that employ proven technology is considered lower, particularly if proven in similar terrain, climate, and scale.

4.17 A good example of relatively high technology risk can be found in the field of telecoms projects, which by their technical nature require very expensive sophisticated equipment and software that is often new to the market. The technology underpinning such projects is constantly evolving and, because such projects will involve the connecting of many points to fashion a network, they generally require a large amount of equipment often from several different sources which gives rise to compatibility risk.

4.18 In the growing offshore wind sector, where contractors have been reluctant to provide EPCM turnkey wraps, lenders have had to analyse carefully the new techniques used for piling and constructing the civil works which support the turbine towers and this has necessitated the structuring of appropriate completion support.

[6] See para. 5.27 et seq.

4.19 While the risks associated with unproven technology are largely self-evident, even proven technology used on an unprecedented scale, can significantly increase project risk. For example, in the petrochemicals and refinery sectors, scale-ups of more than 25 per cent over and above existing and proven facilities may be the cause of concern to lenders, unless the technical evidence is very persuasive.

4.20 There are a number of ways in which operational phase technology risks can be managed and minimized. A contractor skilled in the operation of the relevant technology may be appointed as the operator under an operation and maintenance contract or other operational support can be contracted from an established technology provider. A sponsor, or the party supplying the relevant goods or services, may guarantee a certain performance level from the relevant technology. Failure to achieve such performance level may result in liquidated damages becoming payable by that party. Alternatively, guarantees may be given to cover any shortfall in operational cashflows resulting from technology failure. These types of involvement by a manufacturer or operator, either operationally or through warranties or guarantees, are particularly positive if supported by appropriate financial capacity.

4.21 Where technology risks exist, lenders are likely to place reliance on the opinions of an independent engineer, who will likely be required to confirm, prior to the lenders committing to finance, that the project can be completed to the required standards on the basis of a reasonable completion test.

Completion testing

4.22 The conditions to end any pre-completion support required by the lenders are customarily set forth in the finance documents in a completion test, or through some progressive release mechanism. Usually, post-completion, the lenders expect to rely on the project's ability to perform, which can be demonstrated through a reliability test run. When such testing is completed, the performance risk is usually mitigated through manufacturers' and/or contractors' warranties for a specified period after the commencement of operations.

Off-take (revenue) risk

4.23 The revenue that a project can generate will underpin its cashflows. The key risk to revenue generation is that, over the life of the project, the demand for its output will diminish or that the price it can achieve for its output will be reduced, whether by other, less costly suppliers entering the market, or a particular off-taker deciding to reduce its purchases.

4.24 For that reason, the off-take contract may be central to the financeability of a project. A long-term sales contract with an entity that has an acceptable credit standing, extending for at least the term of a project's loans, may offer a level of assurance to lenders in respect of these 'market' risks. Particularly where there is only one or perhaps a few off-takers, the credit strength of that party or parties will be a key

consideration. If a government owns or controls an off-taker which itself lacks an acceptable credit standing, it may be necessary that the government itself guarantee or otherwise assure the off-taker's performance under the contract.

4.25 Off-take arrangements can range from availability or capacity-based revenue structures, which afford higher predictability of cashflows (i.e. projects in respect of which the market risk has been contracted), to arrangements where revenues are a function of volume and/or the price of the output, where cashflows will be less predictable (i.e. in respect of which the project is taking market risk).[7]

4.26 Typically, availability based payment structures appear in the context of projects entered into by one or a limited number of procurers (for example, in Private Finance Initiative (PFI) social infrastructure, such as school and hospital projects, or power projects in markets which have yet to be deregulated). Such projects are often less exposed to demand risk. Generally, take-or-pay agreements or some other form of arrangement with limited conditionality (such as an availability payment under a concession agreement) will provide a high degree of comfort in respect of off-take risk.

4.27 In the case of power purchase agreements, for example, the tariff will often comprise a capacity and an energy charge. The capacity charge is generally sized to cover fixed charges (such as debt service, equity return, fixed operating charges, taxes, insurance premiums, and administrative overheads), while the energy charge covers the variable operating costs and fuel charges. Other tariff structures may combine the two components into a single unitary charge (often with a minimum purchase obligation) and others may reflect a cost reimbursement or pass-through structure.[8]

4.28 Many projects operate in markets in which long-term sales contracts are not available at economic prices. Petrochemicals, natural resources, oil and gas, telecoms, and, in some cases, electric power, are often sold on spot or short-term markets. These markets may be mature and deep, providing assurance that the project's output can be marketed. However, projects operating in these markets are likely to face significant price instability in response to market conditions. The project's ability to withstand market volatility will determine its ability to raise financing and lenders will expect projects with significant market risk to have the capacity to survive tougher 'sensitivity' analysis in the Financial Model than those without such exposure. Market forecasts will be essential, which may be supported by historical information, if relevant, and such projects may require significant levels of equity or contingent equity support or funded reserves. Financing documentation for these types of projects may also contemplate flexible repayment profiles, with

[7] For example, this may be the case in mining, petrochemical, refinery, telecom, and some infrastructure projects.

[8] For further analysis as to how market risk may be contracted either completely or partially under sales contracts, see Chapter 5.

provision for some principal repayment deferment, as well as, in certain cases, debt prepayment requirements during periods where revenues exceed the original projections. Project companies may seek flexibility to enter into a wide variety of short and medium term sales contracts to allow them to manage market conditions. Issues which need to be considered in this regard include the applicable regulatory environment, the reliability of access to the market, and the transparency of pricing.

4.29 An example of how the regulatory environment can drastically impact upon market risk, is illustrated by the introduction of the New Energy Trading Arrangement (NETA) in the UK in 2001, which intensified competition between electricity generators, leading to a collapse in merchant power prices as it became clear there was too much supply in the market. Following the introduction of NETA, the existing off-take agreements between the distributors and generators had to be renegotiated, which raised a number of issues. Under the previous pooling and settlement system, generators would hedge against price volatility through 'contracts for differences', referencing the universal pool price. However, under NETA, such hedging was no longer effective and agreement had to be reached between the distributors and generators themselves. With wholesale prices in free-fall, long-term power purchase and tolling agreements were no longer commercially sustainable. These regulatory changes in the UK placed considerable stress on a number of project financed power plants, which resulted in lenders becoming very circumspect about financing power projects on a partial or uncontracted basis.

Operating risk

4.30 Operating risk includes the possibility that:

(1) the cost of operating and maintaining the project will exceed budgeted forecasts;
(2) the facility will be unable to perform consistently at a level sufficient to meet the required performance criteria; and/or
(3) the project's operation will be interrupted by the acts or omissions of the operator.

4.31 The operator must have the financial and technical expertise to operate the project in accordance with the cost and production specifications that form the basis of the project's original feasibility study. The necessary skills extend not only to routine operations, but also to undertaking or supervising major overhauls of complex equipment (which may be separately contracted to the relevant equipment supplier). The operator may be an independent company or an affiliate of one of the sponsors. The ability to operate the project efficiently and effectively is usually evidenced by past experience with the same type of project and technology, ideally in the same country and region, together with adequate resources, such as appropriately qualified staff.

Although operators generally resist underwriting the full operating risk of a project, a well-structured operating agreement will provide sufficient incentives to ensure compliance with industry standards of performance. So, for example, contracts which appear underpriced may be regarded unfavourably by lenders as this might lead to delay or reduced expenditure on repairs and maintenance. To the extent that the operator does assume at least some material portion of the risk of operational cost overruns, the sponsors and the lenders will be able to place greater reliance on the certainty of the project's financial projections. **4.32**

In addition to skilled operators, a good management team is crucial to the success of a project. The management personnel are required to make basic policy decisions, arrange financing, provide information to lenders and investors, and take responsibility for administrating the project company. The management must also control the ability of the project to maintain production levels and to comply with legal and regulatory requirements. Thus, the management team needs to be experienced, reliable and serve as a bridge among the sponsors, the operator, the government authorities, and the lenders. **4.33**

Supply risk

A project's inputs or supply requires just as much investigation as its off-take. The particular supply risks which will apply to a project will be determined by the nature of the project itself. For example, a toll road project will depend upon sufficient traffic; telecoms projects will require handsets; water projects will depend upon sufficient water supply; oil and gas and mining projects must have sufficient reserves; a processing plant must have sufficient raw materials and energy; and a power project must have sufficient fuel. **4.34**

Each project must have a guaranteed and steady supply of feedstock, fuel, or other necessary resources at a cost that does not significantly exceed the provision for those costs in the project's financial forecasts. **4.35**

To enable the project to access those materials, it is often necessary that new pipeline, rail, or road infrastructure be constructed, generally by parties other than the project company. The risk that the necessary infrastructure will not be completed in a timely manner must also be addressed. **4.36**

The choice of materials or fuel gives rise to various concerns in respect of supply and transportation. For example, if a power facility is gas-fired, adequate reserves of gas must be available and sufficient pipeline capacity must exist to satisfy transportation needs during the entire term of the financing. Many gas-fired power facilities have the capability to burn oil on a temporary basis, so that if gas becomes temporarily unavailable due to the occurrence of a *force majeure* or other event, the project will be able to continue operating until supply is restored. However, to the extent that the project relies on a single source of supply, as may be the **4.37**

case, for example, with plants fuelled by LNG sourced from abroad, the lenders will focus attention on the political or technical risk of the project's LNG sources.

4.38 For projects that are extracting and/or processing oil and gas or other natural resources, the lenders will focus particular attention on the sufficiency of the relevant reserves. The inquiry focuses both on the extent of the resource in the ground and also on whether it is economically recoverable. Volumes of resource are generally classified in accordance with the degree of uncertainty associated with their existence. The level of uncertainty is highest before the prospect is bored or drilled, and is reduced with the increase in data available as the resource area is mapped and assessed. A reserves audit report may provide a comprehensive tabulation of volumes at any stage of exploration or development, assigning appropriate risk classifications to the existence of those volumes.

4.39 The other variable, relevant to oil and gas reserves, is whether they can economically be recovered. When commodity prices are high, the project company can afford to extract higher cost resources. When prices are low, reserves that are physically available may nonetheless prove uneconomic to exploit.

4.40 Lenders naturally prefer to finance oil and gas projects with sufficient proven, economically recoverable reserves. Although probable or possible reserves may be accorded value, these reserves are given less weight and lenders may require a significant margin of such reserves over the life of the project. In most cases, lenders will require a 'reserve tail', providing assurance that sufficient levels of resource will remain available to be exploited beyond the scheduled maturity of the debt. Lenders may require accelerated repayments (i.e. cash sweeps) if such probable or possible reserves are not converted to proven status at the rate anticipated in the exploitation plan or if reserves are no longer appropriately classified either due to technical or economic criteria. Lenders may also require accelerated repayments of the debt if the reserve is exploited by the project company at a faster or higher rate than was originally forecast in the financial model, so as to avoid debt remaining outstanding should the relevant reserves become depleted.

Currency risk

4.41 Projects derive their revenues either from domestic sales (as in the case of power, water, and infrastructure projects) or exports (as is the case of most natural resources projects), or a combination of both. Domestic revenues may be denominated in (or may be indexed to) a freely transferable currency, but are also frequently earned in the local currency. This is perhaps unavoidable as local consumers will expect to pay for their utilities and public services in the currency in which their own incomes are earned. Export sales, by contrast, are frequently priced in US dollars or another freely transferable currency.

The project's finance (i.e. debt service), capital, and operating costs are likely to be incurred at least in part in international currencies. The liquidity of credit markets is generally deeper in US dollars and euros than it is in many domestic currencies, and thus debt is often incurred in those currencies. Large scale capital assets are also generally priced in internationally traded currencies. Local labour expense, rental costs, and taxes are, by contrast, generally payable in the domestic currency. **4.42**

The risks associated with differing currencies include: **4.43**

(1) revaluation;
(2) convertibility; and
(3) transferability.

Revaluation

If revenues are earned in one currency, but costs (including debt service) are incurred in another, then the project is exposed to the risk that either the relative value of its costs increase (because the value of the relevant currency increases) or that of its revenues diminishes (because the value of the relevant currency depreciates). Although foreign exchange rates may be regulated or 'pegged' at the direction of the host government or central bank, no government can long ignore the effect of financial markets. Foreign exchange risk can, to some extent, be hedged in the market, but generally not for a period as long as the tenor of the loans. Even if available, the cost of hedging can be substantial, particularly if one of the currencies in question is thinly traded. **4.44**

Convertibility

To help manage limited access to foreign exchange, host governments may restrict access to foreign exchange. In such circumstances, the project company may earn revenues in one currency, but may be prohibited from converting it into another, even if its costs (including debt service) are denominated in that other currency. Most cross-border credit agreements expressly prohibit borrowers from submitting payment of principal or interest in an alternate currency, and convertibility restrictions will thus result in default. It may be possible, but perhaps expensive, to insure against this risk through political risk coverage.[9] **4.45**

Transferability

In some cases, the project company may in fact hold foreign currency, but is prohibited from transferring it abroad, whether to satisfy lenders or other creditors or to pay dividends. To mitigate against this risk, many project financings call for the payment of all receivables due to the project company into an account pledged for **4.46**

[9] See para. 4.60.

the benefit of the lenders offshore, generally in a financial centre such as London or New York. This risk is also frequently insured against through political risk cover.

4.47 A project company may be able to hedge much of its currency risk through swaps or hedges. However, the market for such instruments may be limited both in terms of aggregate amounts that can be placed and for the length of period for which hedging is available. This is particularly the case where the local currency market may be relatively small and volatile. A thin currency hedging market may result in the unavailability of hedging or a material impact on hedging cost where banks' swaps desks take full advantage of a captive project to price front-end fees and additional margin into their swap rates.

4.48 An example of a limited currency swap market can be seen in the Indian power sector, which has been dominated by rupee denominated financings. With many Indian banks close to reaching their sectoral exposure limits and with India's significant desire to increase electricity generation, developers are actively considering the US dollar lending market. However, due to the very high pricing of rupee to US dollar hedging, international debt has not hitherto been competitive with local rupee debt.

Financing risk

4.49 In order for a sponsor to fund the development of a project it will need to obtain finance.[10] Traditionally, sponsors will take the risk of procuring the finance required to develop the project, and their ability to obtain financing commitments may be critical in a bid for a project that is being put out for competitive tender by a procuring authority. This is not, however, always the case: for example, in recent projects in Qatar the procuring authorities have solicited proposals from bidding sponsors in a competitive tender situation where the procuring authority assumes the risk of procuring the base financing for the project, and in other cases the procuring authority has tendered a project with a portion of the required base financing already committed and required bidders to utilize that 'stapled financing' as part of the financing plan when bidding for the project.

4.50 A sponsor's ability to source financing on acceptable economic terms will have a significant impact on the profitability (and in some cases viability) of a project. Financing costs (which typically comprises of costs such as interest on the debt and fees payable to lenders and the professional advisers) can have a huge impact on a project's economics. Whilst some of these financing costs are within the project company's control, some are not. By far the most significant of these costs is the interest cost of the debt package.

[10] For further discussion on this subject, see Chapter 3.

4.51 In the majority of cases, the financing available to a special purpose project vehicle will attract a floating rate of interest (which will typically comprise of a LIBOR[11] or EURIBOR[12] rate plus a margin). If the interest payable on a project company's financing is floating, the project company is at risk that there will be a potential mismatch between its income (which it should hopefully be able to predict with a relative degree of certainty) and its interest payments (which will fluctuate in accordance with the daily changes in the rate of LIBOR and EURIBOR). Historically, as has been seen in recent years, there can be significant fluctuations in LIBOR and EURIBOR rates, which exposes the project company to significant risk.

4.52 There are two ways that a project company can mitigate the risk of interest rate fluctuations. The most straightforward of these is simply to obtain financing with a fixed rate of interest. However, other than in the case of multilateral agencies, development finance institutions, and ECAs,[13] many lenders are unwilling to provide fixed rate debt to special purpose project vehicles and even if a lender will offer this type of financing the project company will invariably pay a premium for its fixed rate financing as the lender passes on the cost of hedging its own variable internal financing costs. Furthermore, there are usually high costs associated with the early prepayment of a fixed rate financing and sponsors will wish to keep open the possibility of refinancing the project on more attractive terms once the project is fully operational and lenders are no longer taking a project's construction risk into consideration when pricing debt.

4.53 The second, and most commonly used, way of mitigating the risk of interest rate fluctuations, is for a project company to enter into interest rate hedging agreements. Interest rate hedging agreements, commonly referred to as 'interest rate swaps', play a crucial role in a project company's risk management, so much so that it will normally be a condition to a lender providing financing that the project company enters into an interest rate swap programme set out in an agreed hedging strategy. A typical hedging strategy will require higher levels of debt, and hence floating rate interest exposure, to be hedged in the early years of a project, when debt levels are at their highest and so the economics are the most sensitive to increases in the overall interest burden, decreasing over time as the debt burden, and thus the project's sensitivity to the cost of debt, declines.

4.54 An interest rate swap is a derivative contract that will involve an exchange of cashflows analogous to interest payments on an agreed notional amount of principal. The project company will pay to the hedging counterparty a fixed rate (of notional interest) and receive from that hedging counterparty a payment which will fluctuate in parallel with the floating interest rates of the project company's financing

[11] For sterling or US dollar rates.
[12] For euro rates.
[13] For further discussion, see Chapter 3.

arrangements. The project company will then use the payment from the hedging counterparty to service its floating rate financing. The principal amounts are not usually exchanged and (as noted above) are expressed to be notional.

4.55 In the early days of interest rate swaps, individual transactions were documented as tailor-made, 'full-blown' contracts which would be negotiated in detail between each party's lawyers. In 1985, an organization which is now called the International Swaps and Derivatives Association (ISDA) was formed to set about the task of creating standard forms of documentation. The accepted practice in today's market is for the parties to an interest rate swap to enter into a preprinted ISDA 1992 or 2002 'master agreement' and negotiate a 'schedule' to this master agreement. The master agreement and the schedule, along with a transaction 'confirmation' together form the interest rate swap. In the case of any conflict between the schedule and the confirmation, the confirmation prevails, both of which prevail over the master agreement. The contractual effect of these arrangements is that the master agreement is signed between the parties in its standard form, with any variations to its terms, or particular provisions individual to the specific project, being set out in the schedule. The master agreement and the schedule must therefore be read together to determine the commercial terms applicable to a particular swap transaction.

Political risk

4.56 Political risk may arise from actions by the host government (whether or not arbitrary or discriminatory) that have a negative impact on the financial performance or commercial viability of a project (as is the case with acts of expropriation or the imposition of restrictions on the repatriation of a project's foreign currency earnings). Political risk also arises from other events, such as war and civil disturbance, which may not be initiated by the host government but nonetheless also have a negative impact.

4.57 As a threshold matter, the nature of political risk in a host country can be evaluated through its sovereign credit rating. 'Soft' indicators, such as education levels and the scope of religious and political freedoms, may provide a more nuanced picture for the purposes of understanding the longer-term potential risks faced by a project.

4.58 There are a wide variety of means which may assist in the mitigation of political risk. In many circumstances, the involvement of local investors in the sponsors consortium may be seen as helpful, and the role of multilateral lenders is seen by many as a deterrent to adverse governmental action. Projects whose output may require further processing offshore, or whose access to the market may depend on an international sponsors, may also be able to negotiate away governmental intrusions. However, economic cycles will shift the relative negotiating balances as between investors and host governments, and changes are likely to occur over time in the

standing of the political party that negotiated the original investment terms. As most projects have a long life, they are likely to face changes in the overall environment in which they operate. Hence, many projects will rely on a variety of direct governmental undertakings, treaty arrangements and insurance products to help mitigate political risk.

4.59 In some cases, sponsors may rely on bilateral investment treaties, which afford nationals of a contracting state treaty protection from specified actions (for example, expropriation or discriminating treatment) by the government of another contracting state, to mitigate certain types of political risk. These so-called bilateral investment treaties (BITs) may afford an investor access to international arbitration (often before the International Centre for the Settlement of Investment Disputes (ICSID)) to resolve investment disputes with the host state.[14] In some cases, foreign investors may seek direct and legally binding commitments from the host state to address a range of concerns. In other cases, the sponsors and lenders may be content with a comfort letter given by the government, although it is worth noting that whilst comfort letters may give rise to enforceable obligations, depending on their terms, the remedy nonetheless may be quite uncertain.

4.60 The losses that can result from political risk events are not generally covered under customary property/casualty insurance policies. Separate political risk insurance (PRI) markets may provide coverage, for both equity investment and debt, against political risk. Providers of PRI include export credit agencies, multilateral organizations, and specialized sectors of the private insurance markets.[15] Many lenders, often including commercial banks, are able to assess a broad range of commercial risks, but are often unable to assume the risks associated with political developments, particularly in countries where there is a history or probability of civil unrest or political instability. For such lenders, political risk insurance is often a prerequisite to their internal credit approvals.

4.61 Other lending institutions do not require the protection of political risk cover. Development finance institutions and ECAs, for example, are known as 'political risk absorbing entities' because they will lend without PRI cover and, indeed, may themselves provide political risk guarantees or insurance policies.

4.62 The scope of political risk insurance differs across insurance providers. As a general matter, most political risk guarantees or insurance will cover at least the general categories mentioned in paragraphs 4.63, 4.64 and 4.65 below; many include the category mentioned in paragraph 4.66 as well.

[14] For further discussion see para. 14.25 et seq.
[15] See Chapter 8.

Expropriation

4.63 Expropriation insurance offers protection against loss of the project site or assets as a result of acts by the host government that may impair or eliminate ownership of, control over, or rights to the project or its assets.[16] Such policies will cover the expropriation of the entirety of the project as well as so-called 'creeping expropriation' (i.e. losses attributable to a series of acts that, over time, have an expropriatory effect). *Bona fide*, non-discriminatory measures taken by a host government in the exercise of its legitimate regulatory authority are generally not considered expropriatory. However, there is frequent debate as to whether governmental changes in regulation, such as reductions in tariffs required to be paid to the project company by consumers, constitute expropriation. In some instances, in the context of expropriation claims, it may be necessary to make use of contractual dispute resolution mechanisms to benefit from insurance protection due to the requirement that covered investors take all reasonable measures to prevent expropriatory action.[17] Examples of a covered investor commencing contractual arbitrations with political risk insurance in mind are the *Himpurna* and *Patuha* arbitrations in Indonesia.[18]

Currency transfer restrictions

4.64 Transfer restriction insurance protects against losses arising from the borrower's inability to convert funds that are available to it in local currency into foreign exchange for transfer outside the host country or against other prohibitions on the repatriation of foreign currency earnings. The coverage may also insure against excessive delays in acquiring foreign exchange caused by the host government's actions or failure to act. Currency devaluation is generally not covered.

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[16] See Alliant Techsystems, Inc. (Belarus: 1997), in 1997 Alliant Techsystems, Inc was paid US$6 million by its political risk insurers on the grounds that its business was expropriated by the government of Belarus.

[17] See MidAmerican Energy Holdings Company (Indonesia: 1999); but see Continental Milling Company (Zaire: 1980(I)) (stating that in the context of an inconvertibility decision that 'requiring Continental to take the extreme measures of threatening to exercising either its Art. 22 or Art. 23 prerogatives [the arbitration clause] is not considered a "reasonable step" which the Investor must take').

[18] See M. Kantor, 'International Project Finance and Arbitration with Public Sector Entities: When Arbitrability is a Fiction' (2001) 24 *Fordham Int'l L. J.* 1122, 1132; see also MidAmerican Energy Holdings Company (Indonesia: 1999). The underlying project concerned the development of geothermal fields in Indonesia. Later, the government of Indonesia issued Presidential Decree 39/1997, which divided Indonesia's independent power projects into three categories: (i) those that would be continued; (ii) those that would be reviewed; and (iii) those that would be postponed. Several sub-parts of each of the insured's projects fall under each of these categories. Based on their stage of development, there was no basis for the classifications to be applied to sub-parts of each project. The various classifications caused various lenders to withhold loan disbursements until the issues were resolved with the government of Indonesia. Such resolution never occurred. In May and October 1999, the insured investor received favourable arbitral awards against the government of Indonesia's wholly owned subsidiary. No payment, however, was ever made in accordance with such awards. Subsequently an Indonesian court enjoined the enforcement of the award against the government-owned subsidiary and any further arbitration proceedings against the government of Indonesia.

War and civil disturbance

4.65 War and civil disturbance insurance protects against loss due to the destruction, disappearance, or physical damage to tangible assets caused by politically motivated acts of war or civil disturbance, including revolution or insurrection. War and civil disturbance coverage also extends to events that result in the total inability of the project to conduct operations essential to its overall financial viability. It should be noted that this may not cover commercially motivated sabotage against the project and will generally not cover the effect of wars occurring outside the host country.

Breach of contract or denial of justice

4.66 Breach of contract insurance protects against losses arising from the host government's breach or repudiation of a contractual arrangement with the project company. If such a breach or repudiation is alleged, the covered party must be able to invoke a dispute resolution mechanism (for example, arbitration) set out in the underlying contract and obtain an award for damages. The covered party may make a claim under the policy if the project company's damages award is not discharged within a specified period. Breach of contract coverage is sometimes substituted or supplemented with 'denial of justice' coverage which protects against losses resulting from acts by the host government which prevent the project company effectively invoking the contractual dispute mechanism (or which unreasonably hinder its progress) or enforcing a resulting decision in its favour.

4.67 Political risk insurance providers vary in their approach to defining each of the above categories and in their requirements as to causality (i.e. their requirements concerning the extent to which a particular insured consequence is the result of the occurrence of a particular event), an issue that is of particular importance where there are multiple causes for the loss in question. The customary causality standards range from a direct, to a proximate or even an immediate consequence. Some providers focus on the effect that a political risk event has on the guaranteed parties, such as non-receipt by lenders of their scheduled debt service payments. Others focus on whether the event is such as to prevent the borrower fulfilling its debt service obligations.

4.68 Political risk may also arise outside of the host country. For example, there is a risk that a sponsor or a project may be, or become, subject to some form of international sanction as a result of the deterioration of relations between the home jurisdictions of the lenders or the investors and the host jurisdiction. Both the US and countries in the EU have enacted legislation that authorizes their respective governments to impose sanctions on foreign nationals consistent with specified foreign policy objectives. Such sanctions extend to prohibiting persons subject to their jurisdiction (which may be interpreted quite broadly through 'extraterritorial' assertions of jurisdiction) from engaging in trade and other transactions with persons falling within the scope of the sanctions regime. In recent years, sanctions have been applied to Iran, Iraq, and North Korea, and, by the US, to Cuba. A project company

affected by the imposition of sanctions may find itself without access to key equipment and technology from particular countries may also face financing difficulties as lenders invoke illegality clauses in their credit agreements and cancel credit facilities.

4.69 The nature of political risk is often debated in the context of political risk exclusions to completion support guarantees or undertakings provided by sponsors. Sponsors may be prepared to accept responsibility for achieving completion, but may wish their undertakings to be excused to the extent that completion cannot be achieved due to political events beyond their control. This view may be expressed particularly in circumstances where the project company has paid a premium for PRI to protect the lenders or where there is significant participation in the lending group by political risk absorbing entities. The scope and nature of political risk exclusion regimes vary across transactions, but the material variables are typically as follows:

(1) the definition and scope of what constitutes an 'allowable' political risk event (customarily addressing the political risk events described above);
(2) the events (known as 'bad act exclusions') that preclude a sponsor from claiming the benefit of a political risk carve-out; and
(3) the causality standard between the political risk event and the result (being in most cases a direct and immediate or proximate cause of a default or material adverse effect of some sort).

4.70 Governing law and forum considerations becomes important when approaching political risk exclusions. For example, on the one hand, the completion agreement may specify that the agreement is governed by, say, English law, and that all disputes arising from it will be heard before the courts of England. On the other hand, the PRI policy covering the lenders may be governed by the laws of a different jurisdiction, and all disputes arising from it will be heard before the courts of that jurisdiction. Difficulties could arise where, although the covered parties may have ensured that, on the face of it, the PRI policy provides coverage for the political risk exclusions contained in the completion support agreement, the laws of the relevant jurisdictions interpret the political risk exclusions differently.

Environmental and social risk

4.71 Most industrial facilities emit at least some waste and pollutants into the environment and require permits and other authorizations to construct and operate those facilities. Environmental concerns have become more prominent as a result of increased public and lender awareness, more stringent environmental, health and safety laws, and permitting requirements and heightened liability for the management, identification, and clean-up of hazardous materials and wastes. Regulations to moderate harmful emissions usually exist on a national level and sometimes also exist at international and local levels. These regulations often require studies of the impact of project construction and operation on the natural and social

environment and restrictions on the project's harmful emissions and impacts. Multilateral and bilateral treaties and other agreements often regulate the manufacture, use, and release of certain hazardous chemicals and substances. In addition, increasing emphasis is being placed on the broader impacts of a project, including labour and working conditions for those employed by the project and the preservation of local biodiversity.

4.72 These legal requirements give rise to five primary risks to a project: (a) liability for the discharge of contaminants into the environment; (b) liability for non-compliance with environmental, health and safety laws, and permits; (c) uncertainty in environmental permitting; (d) changes in laws and enforcement priorities that tend to make environmental requirements more stringent over time; and (e) potential exposure to challenges brought against the project by affected populations or interested non-governmental organizations (NGOs) on their behalf. Most countries regulate contamination under a 'polluter pays' regime. Contamination at a project site could give rise to liability and requirements that the polluter investigate and remediate the contamination. Non-compliance risk arises when a project fails to comply with the terms of issued permits or applicable environmental, health and safety laws and regulations. Non-compliance with these requirements can give rise to governmental action to rescind or terminate permits or authorizations or impose monetary fines and penalties or criminal sanctions. Permitting risk arises from concerns about whether a project will be able to obtain permits to construct and operate on terms that are not unduly burdensome or unfair. Permitting risk also arises under regimes that allow NGOs to challenge or appeal the issuance of permits to a project. Change in law risk acknowledges that environmental laws tend to become more stringent over time, often requiring capital upgrades for additional pollution controls or the acquisition of pollution credits. Of particular concern is the regulation of greenhouse gases that are thought to give rise to global climate change, which has given rise to international treaties and host county laws that regulate emissions of greenhouse gases from industrial operations. Social and biological risk arises from actions taken by affected parties, or those acting on their behalf, to object to the project's potential impacts. This risk can often be significant in developing counties where indigenous populations may be displaced by a project, biodiversity may be threatened by project construction and operation or local labour laws may not meet international guidelines and standards.

4.73 In many developing countries, environmental, health and safety laws are generally under development or have only recently been enacted. The government officials responsible for the administration of such laws are sometimes uncertain about how to apply or enforce the laws. Many governments lack the resources to administer environmental regulations effectively and enforcement is often inconsistent or even non-existent. In order to understand the risks related to environmental regulation, it is necessary to understand how the environmental regulatory system works in practice both currently and as it may work (usually more stringently) in the future.

4.74 Much of the regulatory uncertainty stems from how environmental and social laws are administered and enforced. Local authorities often administer the national laws and, in some countries, may impose their own regulations and project authorization requirements. Such regulations and authorization requirements may exist within a legal system that often differs from that to which the lenders or the sponsors are accustomed, and it may be administered in an inconsistent manner even within a single country. The regulatory system may or may not provide for public notice and hearings. It may provide for administrative or judicial appeals of project approvals. Legal action by an individual may be permitted to enforce provisions of the law, to challenge project permit issuance or requirements, or to recover damages from personal injuries or property damage. With the support of international environmental groups, the citizens of many developing countries are becoming more sophisticated in using available legal means for opposing projects.

4.75 Lenders and sponsors generally seek assurance that their involvement in projects will not expose them to liability for hazardous discharges or any type of environmental problems or give rise to reputational risk for environmental issues. For example, in some jurisdictions, the owner or operator of a project (which could be the lenders following foreclosure) may face liability for cleaning up soil contaminated by waste discharge committed by prior owners or operators. If the project site is acquired or leased the project company may seek the benefit of an appropriate indemnity from the seller or lessor for any past or existing environmental problems. If a project gives rise to environmental and social issues during construction and operation the lenders can face a risk to their reputations for financing a project that has environmental problems.

4.76 The involvement of multilateral agencies and ECAs in financing projects generally means that strict environmental and social guidelines will be imposed upon the project. Entities such as International Finance Corporation (IFC) in conjunction with the World Bank, the US-Exim Bank, the Japan Bank for International Cooperation, and the African Development Bank have developed their own stringent environmental and social guidelines. Thus, even if the host country does not have well-established environmental regulations, the project company, at the lenders' request or simply in order to protect itself, will often have to comply with the IFC, World Bank, or other applicable environmental and social guidelines. These extend not only to the assessment and management of environmental risks posed by a project and the moderation of emissions but also to an assessment of the social impact of the project on local populations.

4.77 In 2003 a group of international financing institutions adopted the 'Equator Principles'[19] to govern categorization, identification and management of

[19] The Equator Principles are a voluntary set of standards for determining, assessing, and managing social and environmental risk in project financing based on the IFC performance standards

environmental and social risks of a project. The goal of the Equator Principles is to identify and manage the environmental and social risks of a project. The Equator Principles have since been adopted by over sixty international financing institutions. A majority of lenders in the project finance market have adopted the Equator Principles. Therefore, the arranger of a project financing will find it very challenging to syndicate a financing unless it is able to confirm to potential syndicate lenders that the Equator Principles have been complied with by the project company. It is worth noting that although the Equator Principles are primarily a set of principles to be followed by lenders, it will not be possible for the lenders to comply with the Equator Principles unless the project company carries out certain steps (for example, completing an environmental and social risk impact assessment and environmental and social management plan). The Equator Principles also mandate that certain environmental and social covenants become part of the finance documentation.

4.78 The Equator Principles require projects to be divided into three categories which identify a project's environmental and social risk (projects are categorized in Exhibit I of the Equator Principles[20] as A, B, or C, with category A projects having the greatest risk). The Equator Principles also require the performance of an environmental and social impact assessment from which action items and an environmental and social risk management plan are developed. The environmental and social risk management plan is the key document that dictates how the project company will abate and manage environmental and social risks throughout its construction and operation (a list of the potential social and environmental issues to be addressed is set out in Exhibit II of the Equator Principles[21]). These plans typically impose IFC and World Bank pollution prevention and abatement guidelines on a project, require compliance with international labour, health and safety standards, and mandate appropriate resettlement of displaced indigenous populations.[22]

4.79 International environmental laws now also offer opportunities to encourage the development of certain projects in developing counties. Under various treaties and protocols (both existing and proposed), renewable energy projects in developing nations may be used to generate carbon credits for sale in developed countries. These clean development mechanisms are one example of market-based solutions

on social and environmental sustainability (<http://www.ifc.org/ifcext/sustainability.nsf/Content/PerformanceStandards>), and on the World Bank Group's Environmental, Health and Safety general guidelines (<http://www.ifc.org/ifcext/sustainability.nsf/Content/EnvironmentalGuidelines>). The Equator Principles serve as a framework for the implementation by each adopting financial institution of its own internal social and environmental policies, procedures and standards related to its project financing activities.

[20] <http://www.equator-principles.com/documents/Equator_Principles.pdf>.

[21] <http://www.equator-principles.com/documents/Equator_Principles.pdf>.

[22] Note that under the Equator Principles host countrie's laws apply in lieu of IFC and World Bank guidelines in countries that are classified as 'high income' by the Organisation for Economic Co-operation and Development (OECD).

that are gaining popularity in many countries as a means of confronting global environmental issues.

4.80 Appendix 2 provides a checklist of material considerations that should be addressed in assessing the overall environmental and social risks posed by a project.

Insurance

4.81 All companies engaged in industrial activities face the risk of adverse physical events that can delay or interrupt revenue generation and impose the cost of repairs or even of rebuilding the project. These may include fire, storms, earthquakes, and the like. To address these risks, lenders place significant emphasis on the insurance policies taken out by or on behalf of the project company. Commercial insurance arrangements in project financings are considered in further detail in Chapter 6.

Supervening events affecting contractual performance

4.82 In assessing risk allocation, a risk factor which should be borne in mind is the possibility that a supervening event or combination of events or circumstances may have a material and adverse effect on the ability of a contracting party to perform its obligations under the relevant project agreement. Many project agreements are governed by the law in which the relevant project is located and these laws would be applicable when assessing the possible impact on risk allocation arising from the effects of any supervening events. We set forth below the relevant analysis under English law.[23]

Force majeure

4.83 The underlying principle of the concept of *force majeure* is that no party to an agreement should be held to its performance obligations to the extent that performance is prevented by unexpected circumstances outside that party's control. The *force majeure* concept is a common feature of most commercial agreements including those which form the basis for any project financing.

4.84 Despite the ubiquity of this concept in commercial agreements, '*force majeure*' is not a term of art under English law. The term itself, meaning 'superior force' in French, derives from continental legal systems and has no recognized meaning in English law. Subject to the doctrine of frustration (discussed below), generally English law will impose strict liability for breach of contract. English law places a great emphasis on the certainty and sanctity of contract. The House of Lords has held that:

[23] An analysis of *force majeure* under civil law can be found at para. 12.138 et seq.

> . . . the parties to an executory contract are often faced, in the course of carrying it out, with a turn of events which they did not at all anticipate—a wholly abnormal rise or fall in prices, a sudden depreciation of currency, an unexpected obstacle to execution or the like. Yet this does not of itself affect the bargain they have made.[24]

So, if commercial parties wish to ensure that their agreement is subject to the *force majeure* principle, the usual practice is to expressly exclude strict liability in such circumstances.

4.85 The expression '*force majeure* clause' is normally used to describe a contractual term by which one or both parties is excused from performance of the contact in whole or in part or is entitled to suspend performance or claim an extension of time for performance upon the happening of a specified event or events beyond its control. The effect of a *force majeure* clause will depend on how it is drafted, but for the most part, *force majeure* clauses are suspensory, that is, the affected obligations are not brought to an end, but are simply suspended while the *force majeure* event is continuing (unless the parties agree otherwise). Once the *force majeure* clause is triggered, the non-performing party's liability for non-performance or delay in performance is removed, usually for as long as the *force majeure* event continues.

4.86 Although many *force majeure* clauses go no further than to suspend the parties' obligations so long as the *force majeure* event continues, this may be unsatisfactory if it becomes commercially unfeasible for the parties to resume performance of the agreement once the *force majeure* event ceases. To address this, some *force majeure* clauses allow either or both parties to serve a notice terminating the agreement after a specified 'wait and see' period. Termination can be without liability (except in respect of previous breaches), which preserves a neutral position.

4.87 Unless otherwise agreed between the parties, it will be the party which seeks to rely upon a *force majeure* clause who will bear the burden of proving that the relevant circumstances fall within the ambit of the clause. Such party must therefore prove the occurrence of one of the events referred to in the clause and that it has been prevented, hindered or delayed (as the case may be) from performing the contract by reason of that event. The affected party also needs to demonstrate that its non-performance was due to circumstances beyond its control and that there were no reasonable steps that it could have taken to avoid or mitigate the event or its consequences.[25] Even though an affected party is required to take steps to avoid or mitigate the event under English law (unlike in other jurisdictions) a *force majeure* clause can apply even though the obstacle to performance is not insurmountable.[26]

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[24] *British Movietonews Ltd v London District Cinemas* [1952] AC 166, cited by G. H. Treitel, *Frustration and Force Majeure* (2nd edn, Thomson/Sweet & Maxwell, London 2004).

[25] *Channel Islands Ferries Ltd v Sealink UK Ltd* [1988] 1 Lloyd's Rep 323, CA.

[26] See G. H. Treitel, *Frustration and Force Majeure* (2nd edn, Thomson/Sweet & Maxwell, London 2004) 12.021, which cites *Peter Dixon & Sons v Henderson, Craig & Co Ltd* [1919] 2 KB 778 at 789.

4.88 Where one party seeks to rely on a clause which relieves it of liability if it is 'prevented' from carrying out its obligations under the contract, the affected party will need to demonstrate that performance has become physically or legally impossible, and not merely more difficult or unprofitable. For example, where the intended method of performance is prohibited by government embargo, but a party is nevertheless able to perform in an alternative manner, it is a question of construction of the clause, and of the facts surrounding the case, whether its performance has been effectively prevented by the embargo. Also, if an embargo is not absolute but subject to certain exceptions, the affected party may be obliged to show that it cannot perform its obligations under the contract within the exceptions to which the embargo is subject. Although one might assume that the courts would seek to construe a *force majeure* clause narrowly against a party wishing to rely on it, there is no rule of law to this effect.[27]

4.89 A typical *force majeure* provision will describe the events which constitute *force majeure* for the purposes of the particular project agreement in some detail. Sometimes, *force majeure* may be described as falling within separate categories such as: acts of nature (sometimes called acts of God); acts of man (such as war, industrial action, etc.); acts of government (usually addressed in a project financing under political risk);[28] and impersonal acts. Each type of disruption may be addressed separately with the consequences, associated solutions and remedies and cures differing markedly.[29]

Frustration

4.90 As noted above, English law does not recognize a legal concept of *force majeure*, however, the English law doctrine of frustration will operate to discharge a contract when something occurs after the formation of the contract which renders it physically or commercially impossible to fulfill the contract or transforms the obligation to perform into a radically different obligation from that undertaken at the moment of entering into the contract. It is important to note that the doctrine of frustration is a narrow one largely because of the prevalent use of *force majeure* clauses, which reduce the effect of the doctrine.

4.91 A subsequent change in the law or in the legal position affecting a contract is a well-recognized head of frustration. Similarly, supervening illegality is also treated as an instance of frustration. As such, an event such as the imposition by the UN of sanctions which has the effect of making performance illegal, could give rise to frustration by illegality, which cannot be excluded by any agreement between the parties.

[27] See G. H. Treitel, *Frustration and Force Majeure* (2nd edn, Thomson/Sweet & Maxwell, London 2004) 12.021.

[28] See also Chapter 8 and para. 14.25 et seq.

[29] For further discussion of *force majeure* clauses, see Chapter 5.

Where a contract governed by English law is to be performed abroad and that performance becomes illegal by the law of the place of performance, the contract will not be enforced in England. Such a restriction would only affect obligations arising after the illegality. A contract governed by English law is not frustrated where the law of the place of performance, without making performance illegal, merely excuses a party from performance in full, nor is an English contract frustrated because the party liable to perform would, by its performance, contravene the law of the place of its residence, or of which it is a national (if that law is neither the applicable law of the contract nor the law of the place of performance).

4.92 A contract is also not discharged by frustration where:

(1) the parties have made express provision for the consequences of the particular event which has occurred (for example, where the parties have included a *force majeure* provision in their agreement which covers the situation);
(2) the event is brought about through one of the parties' own conduct (but note that it is for the party seeking to avoid the legal consequences of frustration to demonstrate that the event happened as a result of the negligence or default of the other party);[30]
(3) an alternative method of performance is possible;[31] or
(4) the contract is merely more expensive to perform.[32]

4.93 Accrued rights under a contract which has been frustrated are not extinguished, though the right to sue for such rights may be suspended for the duration of the frustrating event. If the event in question was in existence at the time of making the

[30] *J Lauritzen AS v Wijsmuller BV (the 'Super Servant Two')* QBD (Commercial Court) 1988 and Court of Appeal 1989 involved a contract for carriage by sea of the plaintiffs' drilling rig using Super Servant One or Super Servant Two as transportation. The defendants proposed to use Super Servant Two which sank. The defendants told the plaintiff they would not be carrying out the contract using either Super Servant One or Two. The *force majeure* clause was held not to apply because its subject matter was events which were not under the reasonable control of the defendants. It was held that the essence of frustration is that it should not be due to the act or election of the party seeking to rely on it. The case of *Bank Line and Arthur Capel* [1919] AC 435 was quoted: 'It is now well settled that the principle of frustration of an adventure assumes that the frustration arises without blame or fault on either side. Reliance cannot be placed on a self induced frustration; indeed such conduct might give the other party the option to treat the contract as repudiated.'

[31] Impossibility was also ruled out in the case of *J Lauritzen AS v Wijsmuller BV (the 'Super Servant Two')* QBD (Commercial Court) 1988 because where a promisor has alternative modes of performing the contract and one becomes impossible, that does not make it impossible for him to perform the contract. If the impossibility only comes about because the promisor makes some choice or election, then it is that choice or election which causes the alleged impossibility, not any antecedent event. The court held that the submission that 'frustration should not be excluded by a party's election where his only choice was of which of two contracts to frustrate' was unacceptable as it is 'within the promisor's control how many contracts he enters into and the risk should be his'.

[32] Courts will not apply the doctrine of frustration to relieve contracts which are the result of bad commercial bargains or which would be commercially unprofitable. In *Davis Contractors Ltd v Fareham UDC* [1956] AC 696, which involved a breach of a building contract, it was held by the Court of Appeal that 'it is not hardship or inconvenience or material loss which calls principles of frustration into play'.

contract or was foreseeable by both parties, it will not (except in the case of illegality) frustrate the contract as English law will imply (as prima facie evidence) that the parties considered the risk and allocated it between them.[33]

4.94 When a frustrating event occurs the contract is automatically discharged and the parties are excused from their future obligations. Because no one party is at fault, neither party may claim damages for the other's non-performance. The general rule is that the 'loss lies where it falls' so no claim can be made for the value of a partially completed contract. If a party incurred obligations before the time of frustration, it remains bound to perform them.

4.95 The ability of a party to recover money paid under a contract before the occurrence of the frustrating event depends on the applicability of the Law Reform (Frustrated Contracts) Act 1943 (the 1943 Act). This statute only applies to contracts governed by English law and in respect of which performance has become impossible or been otherwise frustrated. The 1943 Act provides that money paid before the frustrating event can be recovered and that money due before the frustrating event, but not in fact paid, ceases to be payable.[34] The court may require a party who has gained a valuable benefit under the contract before the frustrating event occurred, to pay a 'just' sum for it. This is so whether or not anything was paid or payable before the frustrating event.[35]

4.96 If the contract is one to which the 1943 Act does not apply, then the parties must rely on the common law rules. These provide that money paid before the frustrating event is recoverable only if there is a total failure of consideration. If failure of consideration is only partial, money is not recoverable and any expenditure incurred in performing the contract is also not recoverable.

Procurement rules

4.97 Many jurisdictions require public authorities and utilities, and in some cases suppliers to public authorities and utilities, to comply with public procurement rules. These rules may arise under treaty obligations, domestic law of general application, or specific regulations adopted by the relevant regulatory authority. The primary focus is to ensure that the procuring authority (such as a national utility) contracts with parties only after complying with a public and transparent tendering process. In some cases, losing bidders may challenge and seek to invalidate a contract award to a competitor if the procurement rules were not properly complied with.

[33] In the case of *Davis Contractors Ltd v Fareham UDC* Lord Reid said that the doctrine of frustration did not apply because: 'the delay was greater in degree than was to be expected. It was not caused by any new and unforeseeable factor or event; the job proved to be more onerous but it never became a job of a different kind from that contemplated in the contract.'

[34] See s 1(2) of the 1943 Act.

[35] See s 1(3) of the 1943 Act.

These rules have led to the emergence of public tendering procedures for the provision of services such as power and water, with bidders being required to provide legally binding commitments to deliver the project (fully financed) as bid, often backed by significant bid bonds. These tendering procedures will only be successful in attracting sufficient market interest if the project, as tendered, meets market standards of 'bankability', placing a significant burden on the tendering authority and its advisers to structure both the project and the tendering procedures carefully.

4.98 Procurement rules can also directly affect the project company's activities. The EU, for example, has adopted a number of directives governing procurement by companies furnishing power or similar services to the regulated networks. These rules are designed to ensure that such companies are required to procure equipment and services pursuant to public and transparent procedures. Many sponsors find of concern that these procurement rules extend to contracts between the project company and its affiliates (requiring the sponsors to compete in a public proceeding to be awarded a construction or operating contract for a project company in which it is an equity investor). Certain multilateral credit institutions may impose similar requirements. In each case, the objective is to ensure that the project is developed at a reasonable and market-tested cost. Failure to comply with tendering rules may result, in some jurisdictions, in civil and criminal penalties and even in the invalidation of the underlying concession or contract.[36]

Competition law

4.99 Projects may find that they run foul of national or international competition law and treaties. For example, in the European Union, Art. 81 (formerly 85) of the 1957 Treaty of Rome prohibits all agreements that have as their object or effect the prevention, restriction, or distortion of competition between member states. This can affect various aspects of a project.

4.100 For instance, selling exclusively to one off-taker prevents other potential purchasers from buying the product of a project, which might be regarded as restricting competition depending on the importance of the project in the relevant market. In the case of power, a contractual requirement that the utility must purchase a substantial portion of its capacity and energy needs from a particular facility might be regarded as restricting competition by limiting the ability of the utility to purchase electricity from other facilities. Projects which breach these rules could be required by the European Commission or the courts to amend the contract at a later stage and may find themselves at risk of significant fines and liability to those damaged by the restrictions.

[36] See also para. 12.13 et seq.