

IDENTIFYING AND MANAGING PROJECT FINANCE RISKS: OVERVIEW (UK)

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An overview of the typical risks of a project finance transaction, including construction risk, operational risk, offtake risk and political risk. This note also discusses the methods project participants typically use to manage these risks, including political risk insurance, offshore reserve accounts and turnkey construction contracts.

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Project finance is a form of secured lending characterised by intricate, but balanced, risk allocation arrangements. Lenders extend credit, sometimes billions of US dollars, to a newly-formed, thinly-capitalised project company whose core assets at the time of financial close likely consist of little more than a collection of contracts, licences and ambitious plans; hence the focus on prudent risk analysis and allocation.

The project company is generally a legally-independent **special purpose vehicle** set up by the project sponsor (or sponsors) (who can each be a private or a government-owned entity) for the sole purpose of owning, and borrowing the funds necessary to construct, the project. For a more detailed discussion of the roles of the project company and the project sponsor in a project financing, see *Practice note, Project finance: UK law overview: Parties*.

Though the purpose of any project company, and therefore the project, is deliberately limited, the contractual and commercial arrangements that result from a project financing may be complex and sophisticated, providing carefully for the whole life-cycle of the project. Inputs, whether feedstock or other assets, are sourced and processed, and the outputs are products that are sold and off-taken, with the resultant revenues allocated carefully to particular uses, primarily operating costs and debt service, often under long-term financing and commercial contracts, many or most of which may have been entered into before construction of the project even commenced.



For a general introduction to project finance, see [Practice note, Project finance: UK law overview](#).

Therefore, the key objectives of the various commercial parties and their advisers when negotiating a project finance transaction include:

- Identifying each material risk associated with the design, construction, development and operation of the project.
- Determining which participant is best able to bear each such risk and the mechanism for it to do so.

Failing to identify a major risk or requiring the wrong party to assume or control a particular risk can result in:

- Delays in the project's construction and operation schedule.
- The need to revise transaction documents at additional cost to the parties.
- The project company being unable to repay the lenders.
- Ultimately, loss or abandonment of the project

FACTORS DETERMINING PROJECT RISK

The risks applicable to a project vary from sector to sector and project to project, but they will likely depend on the following:

Nature of the project

Though project financing techniques are used in a number of core sectors, including energy, infrastructure, oil and gas and mining, the technical details of projects differ hugely even within a sector. For example, contrast the different technologies used by, and regulation applicable to, nuclear and wind power projects, or hospitals and transportation projects. However, there are also significant areas of commonality within and across sectors; most projects require governmental approvals or licences, rights to use a variety of other assets, ranging from real property (particularly in the extraction industries) to intellectual property, with the complexity of a project from a technical perspective being a key risk consideration.

Location of the project

A project located in a less economically developed country, perhaps one with unreliable infrastructure (including inadequate utilities, transportation options and social factors), an untested legal regime (raising questions over, amongst other things, the enforceability and value of collateral security) or an unstable political climate (potentially undermining the reliability of core host government agreements and relationships, including the concession agreement, other consents and taxation arrangements), or a combination of all of these, will likely pose greater risks than a project located in a more economically developed country.

However, more economically developed countries will likely pose different challenges to a project, which can include regulatory risks (the imposition of new or amended requirements in a variety of areas such as financial, tax and environmental regulation) and non-legal scrutiny / public relations issues (examples in the European Union would include protests against hydraulic fracturing (or "fracking") research and development, and the perennial divisions over the merits and concerns relating to nuclear power).

Parties involved in the project

Projects are typically sponsored by private companies with particular, and usually very extensive, experience of the sector in which the project is expected to operate. This institutional knowledge provides significant comfort to lenders, but they will also want to know that relevant expertise is held within the project company itself or, if separate, the operator. The private sponsors will likely need to interact closely with governmental or government-owned entities, contending with political issues or considerations that may not be present were all of their counterparties to be entirely from the private sector; for example, the terms of the concession arrangements under which the host country may benefit from the project.

In providing or supporting a project financing, [export credit agencies](#) (ECAs) and other international finance institutions (IFIs) may also bring political support (or, at least, the perception of such support) for a project that private sponsors hope will help manage political risk; that is, increasing the likelihood that governmental parties will respect commercially negotiated arrangements, and regulate reliably and in a non-discriminatory manner. However, such ECAs and IFIs will expect the project company to pay a price in terms of scrutiny from a general information-sharing perspective, but also, in particular, from an environmental and social impact perspective.

TYPICAL PROJECT FINANCING RISKS

Not all of the risks discussed in this note will be present in each transaction (for example currency risks are not relevant in a domestic project finance), but they highlight the types of issues that lawyers should consider when negotiating and drafting project finance documents.

For a discussion of the documents typically entered into in a project finance transaction, see [Practice note, Project finance: UK law overview: Contractual framework](#).

Construction risk

In a project financing, the primary, and typically sole, source of income for the repayment of the debt provided by the lenders is the revenue generated by the project (see [Practice note, Project finance: UK law overview: Offtaker and Offtake agreement](#)). This is known as non-recourse or [limited recourse](#) financing. The result is that, until the project is constructed and, at

least partly, operational, the project company will likely not be able to repay the lenders. Ensuring the proper and timely construction of the project is therefore an absolutely fundamental consideration for all of the parties. Related concerns include:

- **Can the project be completed and operated according to the agreed standards and specifications?** During the initial stages of the project, the lenders, together with the sponsors and the relevant technical experts, conduct feasibility and other studies to assess the viability of the project. The parties analyse the design and specifications for the project to determine whether it can generate the revenues necessary to repay the project debt. Performance shortfalls that arise over the life of the project may require a re-evaluation of the anticipated equity returns and debt repayment profile.
- **Can the project be completed on budget?** The parties agree at the outset the amount of funding that the lenders are willing to provide to support the development and construction of the project. Where construction cost overruns arise, the lenders will not expect, and will likely not agree, to advance additional funds to the project company to help fund the overruns.
- **Can the project be completed on schedule?** Complying with the construction schedule is critical to ensure that the project company can satisfy its obligations under its offtake agreements and generate revenues to fund scheduled loan repayments.
- **Which party should assume the risk and liability for construction delays, costs overruns and performance shortfalls?** The project company has no independent source of revenue and is not therefore in a position to bear these costs. Similarly, where the project debt is non-recourse or limited recourse to the project sponsor, the project sponsor is not directly responsible for the repayment of the debt.

The lenders and the project company frequently address the risks associated with the construction of the project by entering into a **turnkey** construction contract with the construction contractor (or contractors) under which, in exchange for a fixed contract price, any such contractor agrees to construct the project by a specific date and in accordance with the agreed specifications. The project company will likely retain payment of a portion of the contract price pending satisfactory completion of the works. Moreover, the contractor assumes the liability (through the payment of **liquidated damages** and **indemnities**) for construction and performance defects and delays.

The obligation of any contractor to pay liquidated damages, penalties or indemnities under the construction contract may be supported by **parent guarantees**, **performance bonds** or **letters of credit**. Whether any contractor's obligations are supported by parent guarantee, a letter of credit or a performance bond depends on the jurisdiction of the project and

the entity or entities providing the support. For a more detailed discussion of these risks and how they are commonly managed, see [Practice note, Project finance: UK law overview: Security](#).

Particularly in the case of larger projects, where the construction of the facility may be less straightforward or the technology less proven, the construction contractor may not be prepared to accept some or all construction risk and the sponsors may as a consequence be required to provide additional support. Until the project has been constructed to the standards and specifications envisaged prior to financial close, the sponsor may be required to guarantee the repayment in full of any debt financing ("hell or high water guarantees") or provide an intermediate level of support such as an obligation to fund cost overruns. Sponsor completion support can be by way of simple contractual guarantee or, particularly where the balance sheet of the sponsor is insufficient to support a potential pay-out under a guarantee, the provision of letters of credit, from banks or other financial institutions, for the benefit of the lenders.

Operational risk

Once the project is constructed it must be operated and maintained in such a manner that the project company can comply with its obligations under the other project documents. To ensure that the project operates at the level required to generate the revenues forecasted and needed to repay the loans, project participants must, among other things:

- **Engage a competent project operator.** The operator, who may be the project company, is responsible for the operation and maintenance of the project. In exchange for a fee if it is a third party, the operator provides certain services the project needs to ensure the project's operational viability. To ensure the operator is invested in the success of the project, the operator is sometimes the project sponsor or one of its affiliates.
- **Obtain insurance.** The project is typically insured against property damage and may also obtain third party liability and business interruption insurance. However, insurance may not be available for the full, often very large, value of the project or, even where it is available the cost may be prohibitive.
- **Agree to extensive reporting obligations and inspection.** Project finance agreements typically include extensive inspection rights and very broad reporting obligations increasing the likelihood that the lenders will be aware of any problems or issues with the project promptly or pre-emptively (and can apply commercial pressure or assist in finding solutions accordingly).

For more information on the role and obligations of the operator, see [Practice note, Project finance: UK law overview: Parties](#).

Supply risk

Many projects rely on raw materials or commodities for the project to work. For example, a coal or natural gas fired power plant requires access and rights to an uninterrupted supply of coal or natural gas. The prices of these commodities can be volatile and their availability for the life of the project is not assured. The project participants can mitigate these risks by:

- **Executing a long term supply agreement.** A long-term supply agreement insures or guarantees the project company's access to key supplies at a pre-agreed price. It should be noted, however, that a long term agreement are often not in the best interest of the project company. For example, if prices drop significantly, the costs under the supply agreement may be significantly higher than what the project company can obtain in the spot market (that is, were it to be sold at the prevailing market price in the relevant market). Moreover, even at a premium price, long-term certainty of supply is not available in some markets, perhaps for reasons relating to the required volumes or specialist nature of the supplies required.
- **Selecting a qualified supplier.** The supplier must be creditworthy and financially sound so that the likelihood of it becoming bankrupt is minimised. In addition, if the raw materials or commodities are being sourced from politically or economically volatile jurisdictions, the parties may want to consider a supplier with a global reach who is able to source the materials from less volatile places, if required.

Offtake risk

An important consideration for the parties is whether the project will generate the expected revenues or, at least, sufficient revenues to service the debt and pay the project company's expenses (and, preferably, to generate a return for the project sponsor). In addition, the parties must consider how any revenue shortfalls will be addressed. To ensure the project generates the level of revenues that the project participants forecasted for the success of the project, they may:

- **Execute a secure offtake agreement.** Where practical, the parties may negotiate any project offtake contract (such as a power purchase agreement) on a "take or pay" or other firm basis. In a take or pay agreement, the buyer must pay the contract price even if it does not buy or use the entire agreed amount (see [Practice note, Project finance: UK law overview: Offtake agreement](#)). However, project products may be highly or somewhat "commoditised" or marketable (or both) such that sales on a shorter term or spot basis may be more appropriate. In these circumstances, a priority for the project company likely becomes entering into appropriate marketing arrangements; project sponsors often act as a marketer of project product as they may have relevant experience that they utilise in return for a fee or alternative remuneration or benefit (for example, the right to purchase or sell a volume of product).

- **Select a creditworthy offtaker or marketer.** If revenue risk is mitigated by a material take or pay agreement, the relevant offtaker must be able to pay for the product or service the project is providing. The lenders may therefore require that the offtaker have a minimum credit rating. The project company may also require letters of credit to support the offtaker's payment obligations or affiliate guarantees. For more information on letters of credit, see [Practice note, Letters of credit: overview](#). Similarly, where a project company is particularly dependent on the skills of a marketer, the lenders will likely be concerned to verify the financial health of, and ongoing participation by, that entity.
- **Enter into hedge agreements.** These agreements may allow the project company to receive payment from a third party if certain conditions apply (for example, the price for the project's output on the spot market falls below a certain amount).
- **Fund reserve accounts.** If the project product is to be marketed openly, particularly in commoditised or volatile global markets, the project company may be exposed to significant offtake risk. In addition, or as an alternative, to entering into hedging arrangements, the project company may therefore be required by the lenders to set aside cash in a secured account designed to be used where volatile revenues are insufficient to meet debt service obligations.

Repayment risk

The lenders will want to minimise the risk of non-payment by the project company generally. This can occur if the project company generates insufficient revenues (whether due to offtake risk or other cause), has obligations to third parties that take precedence over the payments to the lenders or is otherwise prevented from making the necessary payments to the lenders. To help ensure that the lenders receive the payments to which they are entitled when and in the amounts due, the parties can:

- **Set up a debt service reserve account.** It is customary in project financings to provide for a dedicated and secured debt service reserve account. This account (funded with loan proceeds or project revenues) enables the project company to make debt service payments, typically for six months, in the event that it does not otherwise have the funds to make them. For example, if there is a problem with the project, even where no revenues are being generated. The project company will be obligated to replenish this account as needed, which may be practical if the problem necessitating the use of the account is short-term, such as a maintenance event. However, the project company may not, of course, be able to replenish it if the project is unable to generate the anticipated revenues for a longer period.

- **Apply ratio tests.** The ability of the project company to service debt will generally be tested in project financings on the basis of debt service cover ratio and loan life cover ratio tests. These will generally apply at financial completion, physical completion and as a condition to certain acts by the project company, such as the payment of dividends. They may also be tested periodically with failure giving rise to an event of default or other sanction.
- **Limit the size of the debt.** Depending on the project and the project sponsor, the debt-to-equity ratio may be as high as 80:20 or as low as 50:50. The proportion of the project cost permitted to be funded by debt depends primarily on the creditworthiness of the project (determined largely by reference to financial ratios referred to above, the magnitude of the risks it is exposed to, particularly offtake risk, and partly by the state of the credit markets at the time the project financing is arranged).
- **Obtain appropriate insurance coverage.** In some cases, political risk insurance (PRI) may be available to safeguard against political risks, as discussed further below (see [Political risk](#) and [Currency risk](#)).
- **Limit the project company's obligations to third parties.** This minimises the claims that may be brought against the project company by a third party. Where that is not possible, the participants should:
 - obtain consents to assignments or direct agreements under which certain third parties agree not to declare a default under or to terminate their agreements or to bring suit without the lenders' consent (see [Practice note, Project finance: UK law overview: Direct agreement](#)); and
 - negotiate broad and comprehensive indemnification provisions for third party claims.
- **Ensure tax obligations and other payments that may have priority over the lenders are paid.**

Political risk

Some of the main risks a project located in a less economically developed country faces are political risks (also known as country risks), which includes war or civil disturbance, expropriation, exchange controls or other types of currency transfer limitations. For more information on expropriation, see [Practice note, Expropriation in international investment law](#). Similarly, a project company will be exposed to changes in the tax regime applicable in the relevant jurisdiction (or the regime specifically created or amended to be applicable to the project company in a jurisdiction with less developed regulation).

There are several ways in which political risks may be mitigated, including:

- **Governmental assurances.** This may take the form of [comfort letters](#) from the government indicating its support of the project. These letters do not, however, constitute an enforceable obligation or commitment by the government to the project. In addition, in the event of a change in government, particularly in non-democratic circumstances, the new government may not want to follow the terms of the comfort letter.
- **Stabilisation clauses.** These are clauses that may be included in international investment agreements under which the government agrees not to take certain actions or to compensate investors for the costs of certain actions they take. These clauses provide stronger protection than a government comfort letter in that they at least purport to bind any future, as well as the present, government to a particular regulatory regime. Sponsors and lenders will therefore be focussed on the form of language and commitment made from an enforceability perspective, but may in any event need to take a view on the likely future political climate in the relevant jurisdiction. The use of stabilisation clauses is not without controversy – future governments may argue that the clauses were entered into under duress, and many multilateral finance institutions involved in a financing may not be comfortable with attempting to limit the scope for legislative development, particularly in the areas of environmental and social regulation. For more on stabilisation clauses (see [Practice note, Securing investment protection for foreign direct investment: Consider what additional protections to add](#)).
- **Bilateral investment treaties (BIT).** These are agreements between two countries that establish the terms and conditions under which nationals of one country invest in the other. BITs provide some of the same protections as PRI policies. However, unlike PRI policies, they are not negotiated or entered into by the investor (although they may afford the investor with directly enforceable rights). They are negotiated by government representatives of the relevant countries and are intended to promote investment and ensure the investments and assets of their nationals are protected.
- **PRI.** PRI repays the lenders if the project is damaged or destroyed by, or as a result of, political violence. Further, in the case of a currency restriction which prevents the transfer of funds abroad, it also provides lenders with currency offshore (for example, US dollars) in exchange for the local currency; most insurers do not protect investors from a devaluation of the local currency – investors typically enter into currency [swaps](#) or [hedging](#) agreements to manage this risk (see [Currency risk](#)).

PRI policies usually also cover seizure of the project or project assets by the government or governmental actions that have the effect of transferring private property to a public entity over time (also known as “creeping expropriation”, see *Practice note, Expropriation in international investment law: Creeping expropriation*). They do not, however, generally cover legitimate governmental actions that adversely affect the financial viability of the project such as increased taxation or higher royalty payments for government concessions. Investors can obtain PRI from public and private insurance companies. Two public sources are the Multilateral Investment Guarantee Agency and the *Overseas Private Investment Corporation* (available for US investors only). Parties can also obtain PRI from private sources such as *Lloyds of London* or Sovereign Risk Insurance Ltd.

- **Lender Support.** PRI may be provided by export credit agencies or other international finance institutions, but, even in the absence of express PRI policies, the involvement of these entities in a project financing may provide very effective “soft comfort” to private sponsors and other lenders with respect to political risks; this “halo effect” is driven by the leverage and influence these entities enjoy with host governments and other public bodies. There is also a strong recognition that, at a macro-economic level, government interference with a project will be seen in a very negative light, likely with consequences for the perceived investment climate applicable to the relevant country.

Currency risk

If the project output agreement (for example, the power purchase agreement or the gas transportation agreement) is in a currency different from the loan, the project participants must also consider currency devaluations and currency inconvertibility. The primary risks are:

- Interference in the ability to convert the local currency into foreign currency (generally US dollars).
- Transference of the foreign currency out of the country.

There are three main ways (of varying utility) parties can mitigate these risks:

- **PRI.** Lenders can get coverage for currency inconvertibility or for transfer risk from private and public sources. Public or government insurers do not currently cover currency devaluation.
- **Currency swaps.** By entering into a swap which sets up in advance the amount of one currency that a party will receive for a specific amount of another currency, the lenders are able to hedge or protect against currency devaluation, but hedging arrangements may be subject to defences in the face of inconvertibility or transfer restrictions.

- **Offshore reserve account.** Typically, in projects where there is a currency risk, a portion of the loan proceeds is deposited into a debt service reserve account located outside the jurisdiction of the project that can be drawn upon if the project company does not make a payment on the loan for any reason. The offshore reserve account is of limited utility, however, as it typically includes an amount sufficient to pay one or two interest and principal payments. If the currency restriction continues for a longer period, the lenders are at risk of not getting repaid in the interim, subject to any political risk policies that may be in place (see *Political risk*).

In the event of currency transfer restrictions it may also be possible for certain lenders, typically multilateral finance institutions or lenders under “B loan” structures linked to relevant multilateral finance institutions, such as the International Finance Corporation, to assert preferred creditor status and require payment. Such status is generally recognised, if at all, as a matter of practice rather than of express law or the treaty under which the relevant institutions are constituted.

Authorisations risk

Certain projects depend on the obtaining and the continued availability of governmental approvals, permits or licences to construct or operate the project. These include:

- Environmental permits.
- Drilling permits.
- In the case of a foreign investor, permits to own property, employ expatriate labour or operate the project.
- Approvals to import goods into the country or to transfer funds out of the country.

In some cases, it may take months or years before a permit is issued or renewed. If that is a possibility, the project sponsor must consider how to pay for the costs of these approvals and developing the project until the necessary permits are obtained. Lenders are unwilling to finance these development costs because a project may never materialise. As a result, the project sponsor may finance these costs itself or sell an interest in the project to equity investors. If the project is financed, the project sponsor may be allowed to recoup some of these costs.

Where the project is subject to ongoing regulation, or involves the payment of royalties (for example, royalties based on the amount of oil extracted and sold from the host country’s oilfields), it is subject to the risk of changes in the underlying regulations or in the manner in which they are applied or enforced.

The risks associate with these types of governmental supervision may be mitigated in part by requiring the:

- **Host government to agree to a stabilisation clause in their documents.** These clauses address how changes in law following the execution of an investment agreement with a governmental entity are to be treated and the extent to which these changes modify the rights and obligations of the project company or project sponsor under the investment agreement. Typically, stabilisation clauses provide that the government will not implement laws that will have an adverse effect on the profitability of the project (see [Practice note, Securing investment protection for foreign direct investment: Consider what additional protections to add](#)).
- **Delivery of appropriate legal opinions.** Typically, counsel to the project company is required to deliver legal opinions about the approvals and licences necessary to construct and operate the project and the enforceability of these approvals and licences.
- **Project company to make appropriate representations and warranties.** These must include the effectiveness and enforceability of any approvals that may be required.
- **Delivery of approvals and licences.** The project company and its counsel must, as a [condition precedent](#) to the initial disbursement of the project debt and any subsequent [drawdowns](#), deliver enforceable and effective approvals.

None of the foregoing measures are guarantees, however, as the government can change or repeal a law or revoke a licence or approval. In such cases, the sole recourse to the lenders may be to accelerate the loan and exercise its remedies under the project documents.

Dispute resolution risk

In international project finance transactions, the parties must determine the law that should govern their transactions (to the extent they have a choice) and whether any disputes that arise under the documents will be resolved through arbitration or judicial means. International project financings are typically expressed to be governed under English law or New York law (and disputes are referred to English or New York courts, respectively) as project participants take comfort that these regimes offer clarity and reliability of interpretation, but commercial contracts are more likely to be governed by local law; that is, the laws of the jurisdiction where they will primarily be performed.

Project participants often select arbitration if:

The project or the borrower is located in a jurisdiction with an unreliable or unsophisticated judiciary.

- The lenders are concerned that a governmental entity or politically connected person may exercise undue influence on the proceedings.
- A judgment will not be recognised or given effect in the jurisdiction. There are few international treaties or conventions requiring the recognition of overseas judgments, decrees or orders. Lenders must rely on the laws of the relevant jurisdiction as to whether it will give effect to the foreign judgment. However, where the local jurisdiction is party to the New York Convention on the Recognition of Foreign Arbitral awards, or a similar regional treaty, there may be somewhat greater certainty that it will enforce a foreign arbitral award without reviewing the award on its merits.

For a more detailed discussion of the reasons parties choose arbitration, see [Practice note, Why arbitrate?](#).

For more on choosing a governing law in finance transactions, see [Practice note, Choosing a governing law in finance transactions](#).

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