

THE PROJECT
FINANCE LAW
REVIEW

Editor
David F Asmus

THE LAWREVIEWS

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REVIEW

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This article was first published in May 2019
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Editor
David F Asmus

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Published in the United Kingdom
by Law Business Research Ltd, London
87 Lancaster Road, London, W11 1QQ, UK
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Enquiries concerning editorial content should be directed
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ISBN 978-1-912228-72-0

Printed in Great Britain by
Encompass Print Solutions, Derbyshire
Tel: 0844 2480 112

ACKNOWLEDGEMENTS

The publisher acknowledges and thanks the following for their assistance throughout the preparation of this book:

ALLENS

KIRKLAND & ELLIS LLP

L&L PARTNERS

MAYER BROWN LLP

MILBANK, TWEED, HADLEY & McCLOY LLP

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PREFACE

Many of the classic project finance texts are becoming increasingly dated as the years go by, while project finance itself continues to evolve with the markets it serves. The purpose of this volume is to provide a living guide to project finance that will be updated on a regular basis, while still tackling the core project finance concepts that every practitioner needs to understand.

As the inaugural addition, this volume seeks to cover the most salient topics while leaving scope for expansion into other key areas (such as mezzanine financing, government funding, and social and environmental issues) in the second edition. As discussed briefly at the end of chapter 1, all three of these areas have been in great flux, with newer funding sources (e.g., private equity), changes in the bond insurance market and more substantial environmental restrictions in effect at key lending institutions (particularly with respect to climate change concerns) all combining to change the complexion of the project finance market. The next several years should bring more clarity to all of these subjects, including particularly the future of project finance in the large oil and gas industry.

I would like to express my thanks to all of the authors of this inaugural edition. It is never easy to be a pioneer, which in this case entailed late nights drafting chapters from scratch for a new publication. Our authors have executed this task with distinction and aplomb. It is the hope of all of the authors that this volume not only will be of use to all of its readers today, but will also continue to grow in scope and utility in the years ahead.

David F Asmus
Sidley Austin LLP
Houston
April 2019

WHAT IS PROJECT FINANCE?

*David F Asmus*¹

I DEFINITION OF PROJECT FINANCE

Project finance is a specialised form of financing, utilised in a very specific circumstance – the non-recourse or limited recourse funding of an individual asset or set of assets (a ‘project’). Some of the more significant distinguishing characteristics are:

- a* with certain exceptions, described later in this volume, payment is entirely dependent upon the revenues earned from the relevant project, without recourse to the sponsors;
- b* as a result, the loan liability generally is ‘off balance sheet’;
- c* dependable cash flow to the project is required – this is achieved both by an absolute requirement for payment, without excuse or set-off, and by the creditworthiness of the payor;
- d* the project is typically walled off in a separate project company – a special purpose vehicle (SPV) – that is bankruptcy remote from the project sponsors and is tightly controlled by the lenders, because of the financing’s dependence on project cash flow; and
- e* lenders hold security over all material project assets, as well as the sponsors’ equity in the project company.

At a very high level, the project can be thought of as a box, walled off pursuant to the lender requirements, into which financing is advanced, from which a product is sold, back into which proceeds of those sales are received, and out of which loans, and interest, are repaid. The project debt is either non-recourse or limited recourse (for example, an obligation to fund construction cost overruns) to the project sponsors, so the sponsors’ risk is limited to their equity investment in the project.

Because of its reliance on project cash flow for loan repayment, a project financing arrangement intrudes deeply into the operation of the project. Each material contract is reviewed and signed off on by the lenders, and changes will require lender approval. The need to assure cash flow generally leads to requirements to hedge prices during the loan term, where a commodity is involved, and to hedge currency risk during the loan term, where proceeds received by the project are in a different currency from the loan. Project cash flow is controlled through a requirement that proceeds received by the project be deposited into a series of accounts controlled by the lenders, from which funds are disbursed in accordance with a predetermined ‘waterfall’ (priority) scheme (discussed later in this volume).

¹ David F Asmus is a partner at Sidley Austin LLP.

This type of financing differs significantly from general corporate financing, where the credit of the sponsor entity, not a particular set of its assets, is most important to the lenders, and where, even if the financing is secured, the lender is more concerned about the value of the assets as a whole rather than the detailed contractual arrangements for a given subset of them. While project financing and structured financing share a number of the characteristics recited at the top of this page, project financing also differs from structured financing, where various assets of a particular class, or their cash flows, are pooled and securitised, and combined with derivative instruments, to spread risk and increase liquidity, rather than concentrating and controlling risk in a single or small set of assets.

II CHALLENGES OF PROJECT FINANCE

As would be expected for a financing that is dependent upon a single asset or small set of assets, and the contracts that govern them, project financing is very paper intensive. In addition, risk is heightened by dependence upon the single asset or set of assets, and a single source of cash flow for repayment. These factors often make project financing expensive, particularly when compared to general corporate financing. Although security is taken over all project assets, the real source of repayment is project cash flow, not potential sales of the project assets upon foreclosure (which may be difficult, or impossible in the case of public infrastructure), so lenders have a strong interest in assuring that cash flow will continue. Project financing is therefore restrictive, with noticeably more information requirements, specific covenants and lender consent rights than in a general corporate financing. For example, the relevant project company is typically not allowed to participate in any lines of business unrelated to the core business of the project, to reduce risks to the lenders. Defaults in the underlying project documents can be expected to trigger a default under the project financing as well.

III REASONS FOR UTILISING PROJECT FINANCE

What, then, are the drivers for sponsors to utilise project financing? There are actually quite a number.

First, where a project has very high capital needs compared to the capitalisation of the sponsor or sponsors, general corporate finance is likely not an option. The same is true where a sponsor or sponsor's credit is not sufficient to attract reasonably priced, or any, general corporate finance. Mid-sized and smaller sponsors, and less creditworthy sponsors, are more likely to seek project finance than large, highly rated entities with ready access to the capital markets. Similarly, sponsors developing very large projects are more likely to seek project finance than those developing small projects.

Second, because of the non-recourse nature of project finance, the lenders are bearing a significant share of the project risk (though, as discussed throughout this volume, they take numerous steps to reduce that risk). A sponsor may prefer to share the risk of a risky project with others, particularly where the risk-sharing party is a lender who does not require a full equity rate of return. As noted above, the sponsor's financial exposure is generally limited to its equity investment.

Third, despite its cost, project finance may enhance the return on capital employed in a project, by increasing the debt levels that a project can bear. A classic example would be the early liquefied natural gas (LNG) financings in which lenders (including, indirectly, export

credit agencies) funded 100 per cent of the basic cost of the liquefaction plant. Although those levels of funding would be challenging to achieve today, because of the bankruptcy remoteness of a project-financed project and the degree of lender control over contracts and cash flow, lenders may be willing to advance a larger share of the project's cost (for example, 70 per cent or 80 per cent) than they would through a traditional secured corporate loan, particularly where the sponsors do not have strong credit.

Fourth, because of the off-balance sheet nature of project finance, sponsors may prefer to employ it, even if it has a higher cost, because it does not directly impact their general corporate credit, which they may prefer to have available for other purposes.

Fifth, where a number of sponsors need to finance the same project, project finance by the sponsor group may greatly simplify funding, and ensure that the entire group, including those entities that are smaller or less creditworthy, are able to provide the necessary funding.

Sixth, sponsors may find that project finance reduces political risk in high-risk countries, as the presence of bilateral and multilateral lenders and major international banks may make host governments or other local players more reluctant to interfere with the project and its cash flow, at least during the tenor of the loan.

Seventh, certain project finance may, in contrast to the usual situation, offer concessionary terms. For example, export credit agency financing to encourage the purchase of capital goods from a certain country may offer very attractive rates. In addition, some government-backed funding (for example, municipal bonds in the United States) may offer tax advantages to the funding parties and thereby lower the cost of capital for the project.

Eighth, and finally, project finance ensures a careful and detailed structuring of the project and management of its risks, reducing the odds of project failure for the sponsors as well as the lenders.

This is by no means an exhaustive list of the reasons sponsors may seek project financing, but it does recite the most common reasons why an often higher cost, and certainly more complicated, route to financing may in fact be the most attractive one.

IV TYPICAL USES FOR PROJECT FINANCE

As might be expected from the list of drivers for use of project financing recited above, certain types of projects are far more likely to see this sort of financing.

Energy projects (both oil and gas, and electric power) comprise the largest single share of worldwide project financing. They share the characteristics of having large capital needs, in many cases having higher than average risk, occupying a politically sensitive sector, and, in the case of oil and gas, often having a number of sponsors.

Mining projects, comprising the second largest share of worldwide project financing, are also a significant user of project finance, for similar reasons.

If private real estate projects are excluded, public and quasi-public infrastructure projects (airports, roads, bridges, dams, stadiums and the like) then comprise the third largest share of worldwide project financing, for different reasons. Governments may expand their outlays without seeking increases in general revenue funds by utilising project finance. This provides a convenient way to fill budgetary shortfalls in a politically acceptable manner. Governments have the ability to issue project bonds that bear relatively low rates, because of implicit government sponsorship and in some cases tax benefits attaching to the income earned (though as many defaults have shown, the implicit government backing for

the project will not in practice prevent a default on the bonds). Governments may also be able to raise funds and shift some of the burden to the private sector through public-private partnerships (PPPs), which are discussed later in this volume.

V SOURCES OF PROJECT FINANCE

Project financing for all of these projects may be obtained from a variety of sources that are discussed in detail later in this volume. These include capital markets (through public bond issuance or private placement), commercial lenders, government funding (including government bonds), multilateral lenders and regional development banks, and national export credit agencies and insurers, among others. Some sources (e.g., bonds) tend to impose fewer constraints on the project but those constraints may prove much harder to modify or waive. Others (e.g., commercial lenders) may be quite intrusive with regard to project operations but easier to work with as changes occur in the project. Still others (multilateral lenders and regional development banks, export credit agencies, etc.) may offer particularly attractive rates and perhaps political risk protection, but with strings attached, such as requirements to purchase goods of certain national origin, follow certain preferred environmental or labour standards, and the like. Project financing for larger projects may include tranches from several of these sources, with inter-creditor agreements and common collateral arrangements used to manage the interrelationships between the various creditors.

VI BASIC STRUCTURE OF A PROJECT AND PROJECT FINANCING

Although the sets of agreements and interrelationships in a project are quite complex, they can be broken down into a handful of basic categories that make them more understandable:

i Equity agreements

The various project sponsors will have agreements among themselves, often centred in a shareholders' agreement, joint venture agreement or similar arrangement, that define their requirements for capital contributions, rights of governance, and entitlement to distributions from the project.

ii Host government agreements

In much of the developing world, host government agreements for a project may consist of concessions or similar agreements spelling out in great detail the rights and obligations of the project company (and perhaps project sponsors as guarantors) vis-à-vis the host government. These rights and obligations may include matters such as work commitments and schedules, tax payments and other fiscal obligations, and tax holidays and other incentives, local contracting and hiring, domestic supply obligations, dispute resolution, and stability of terms (if any). In the developed world, host government agreements are most likely to consist of permits obtained following various processes required by generally applicable laws, particularly in the areas of land use and environmental restrictions, though incentive agreements, particularly at the regional and local level, may be available in these countries as well.

iii Supply agreements

Aside from public infrastructure projects, many projects involve the conversion of some type of raw material or fuel into a useable or transportable product (e.g., liquefied natural gas, refined products, metals and electricity). The agreements under which the raw material or fuel is supplied to the project are critical to its success and must assure a supply throughout the loan term.

iv Offtake agreements

At the back side of most projects, a product is produced that must be monetised in order to generate project cash flow. Again, these agreements (and the credit of the offtaker) are critical to the success of the project, and must assure cash flow throughout the loan term.

v Construction agreements

The principal purpose for most project financing is the construction of the project. During construction, lenders must advance most if not all of the project finance funding prior to having a finished project that can generate revenues to repay the loans. Certainty of project completion and construction price, and coverage for cost overruns, if any, will be major focuses of the project lenders. A single engineering, procurement and construction contractor may 'wrap' project risk under one agreement, or some services and goods may be separately supplied. In either case, the greater the risk to the project, the more likely it is that the lenders will insist on some level of recourse to project sponsors during the construction phase.

vi Operation and maintenance agreements

The quality of the operator and its effectiveness in operating the project are key concerns of lenders. A project that is operated poorly will suffer mechanical breakdowns, government fines and potentially mandated shut-downs, and low productivity. All of these threaten the cash flow upon which the lenders depend.

vii Financing agreements

Aside from a basic loan agreement or indenture, there are numerous other agreements used in a project financing, many of them having to do with security over collateral, the control and management of cash flows, and the relationship among multiple lenders. These are discussed in detail in other chapters of this volume.

Lenders will be concerned about all of these contractual arrangements, as all of them must work together as a seamless whole for the project to be successful. The project finance documentation will include security over all of the project agreements (except, of course, the financing agreements themselves).

VII EVOLUTION OF THE PROJECT FINANCE MARKET

Recent years have seen some changes in the project finance market that may affect how deals are funded and structured. These include the exit of some traditional commercial lenders from the project finance market, and restrictions placed by others, particularly European banks, on the sectors for which they will provide funding (e.g., restrictions on coal, oil sands, and other developments viewed as less environmentally friendly). The near-collapse

of the monoline insurance market (which served, among other things, to enhance the credit of various government project bond offerings, particularly in the United States) during the 2008 financial crisis increased the difficulties in marketing some government bonds to fund local infrastructure projects. These challenges, and budgetary pressures facing governments around the world, have helped in turn to fuel a rise in the PPP market, where direct private investment has stepped in to relieve government funding needs for infrastructure expansion. In addition, new competitors have arisen to traditional project finance, including structured finance used to bundle and fund multiple smaller projects (e.g., schools, rooftop solar) and private equity, which may provide an alternate source of capital for projects at the lower risk end of the spectrum (e.g., pipeline or terminal development). Notwithstanding the changes, the project finance market remains a critical element of support for the development of energy, mining and public infrastructure projects around the world.

PROJECT FINANCE ARRANGEMENTS IN GENERAL

Rajiv K Luthra and Pallavi Bedi¹

I PROJECT FINANCE – INTRODUCTION

Project finance is a way to finance large infrastructure projects that might otherwise be too expensive or speculative to be carried on a corporate balance sheet. The structure of project finance structure revolves around the creation of a special purpose vehicle (SPV) that holds all the project's assets, including all of its contractual rights and obligations. For equity investors, the appeal of project finance is to maximise equity returns.

This form of financing is primarily based on the strength of the projected cash flows of the SPV. Relevantly, project finance in India (and a number of other developing nations) is not purely a non-recourse financing (which is the usual form of project financing in developed nations) but is usually a limited recourse funding, which basically means that the promoters or parent of the SPV provides an undertaking to the lenders till the commissioning of the project to, among other things, fund cost overruns (at times subject to caps), retain majority shareholding in the SPV, pledge its shareholding (either 51 per cent or more) to the lenders, and be responsible for creation of the debt service reserve.

Corporate financing on the other hand entails funding a group or existing corporate entity with a strong balance sheet and the main recourse is on the corporate entity.

Project finance transactions usually involves the following key stakeholders:

- a* the SPV, a newly incorporated company for developing the project;
- b* the sponsor or shareholder, the parent company of the SPV that is, *inter alia*, responsible for infusing equity into the proposed project and providing the required sponsor support to the lenders funding the project in most developing nations;
- c* the lenders, which extend long-term financial assistance to the SPV for the implementation of the project in an agreed debt-to-equity ratio, and enter into the financing and security documents;
- d* the engineering, procurement and construction (EPC) contractor, which is responsible for the construction of the project and an EPC contract is executed in this regard;
- e* the operations and management (O&M) contractor, which is appointed by the SPV for the operation and maintenance of the project after commissioning;
- f* the offtaker, which procures the project product and enters into an offtake agreement (the power purchase agreement (PPA) in power projects) to record the terms of the offtake (critical as this is the entity responsible for payment of revenues to the SPV);

¹ Rajiv K Luthra is founder and managing partner and Pallavi Bedi is a partner at L&L Partners.

- g* the landowner, from whom the land for the project is procured by a sale or lease deed executed by the SPV – the availability of encumbrance-free land being critical for large infrastructure projects; and
- b* in power projects, the transmission entity, since contractual arrangements with the transmission licensee are required to get a right to extract power from the project.

II LOAN PROCESS

i Technical and financial evaluation of the project

As a first step, a project developer approaches the identified lenders with the details of the project either directly or through a syndicator. Usually project finance facilities are provided by a consortium of lenders, with one lender acting as the lead. Sometimes a bilateral facility is initially entered into, with the lead lender then selling on parts of the total commitment. The lender first evaluates the project from a technical and financial perspective and processes the loan application through its internal systems based on preliminary due diligence on the project. Based on this evaluation, usually the lender issues a term sheet or sanction letter setting out indicative terms and conditions (including relevant commercial assessments such as the pricing of the loan and security cover required) on which it would be willing to grant financing to the project, based on discussions with the borrower. Once this term sheet or sanction letter is agreed between the parties and issued, then the process of detailed due diligence on the project from a technical, financial and legal perspective commences. Simultaneously with this due diligence exercise, the preparation of the documentation for the grant of the financing is also commenced.

ii Legal due diligence of the project

Some of the main aspects that are discussed between the borrower and the lender during this phase are as follows.

Bankability of project documents

To obtain project financing, a borrower needs to ensure that the project documents that it executes for a project are bankable (as lenders would insist on this). Some of the project documents that are usually required as a condition precedent to funding by lenders are the EPC contract, concession agreements (in road projects) and PPA (for power projects). Some of the key project finance principles usually considered while drafting or reviewing project contracts are as follows:

- a* the EPC contract must be executed with the construction risk (for time delays and performance standards) adequately passed on by the SPV to the EPC contractor, with corresponding provisions for liquidated damages for delays and performance;
- b* there must be a guaranteed revenue stream from a creditworthy purchaser under the offtake agreement or PPA (in power sector projects) to support the economics of the project;
- c* the duration of the offtake arrangements or the PPA securing cash flows should match the tenure of project debt;
- d* there must be adequate performance security (to be assigned to the lenders) obtained from the EPC contractor to ensure performance of the EPC contract to mitigate construction risk;

- e* there must be warranties of appropriate substance and duration, and subsequent manufacturer coverage, to avoid the incurring of unbudgeted expenses by the project company (EPC contractor liability for design and installation defects);
- f* the O&M agreement must ensure adequate operation and management services for the project to ensure project performance at projected levels;
- g* there must be a collateral assignment of the main project contracts such as the EPC contract, PPA, the O&M contract, to ensure that the lenders are entitled to step into the shoes of the SPV on occurrence of an event of default; and
- h* the interface issues or risk allocation must be addressed in each of the project contracts so that the risk is allocated to the project stakeholder that is best equipped to manage the risk and so that the entire risk does not sit with the SPV.

Land due diligence

Land due diligence procedures are important to ascertain that the SPV has the legal right to the land where the project is to be developed, without any prior encumbrance. It is one of most critical aspects of the due diligence phase and project development; and an issue that needs to be confirmed as a condition precedent to funding by the lenders. Non-availability of land and related consents may lead to delay in project implementation. The nature of the due diligence mainly depends on the type of the land involved; and mainly the land for projects is:

- a* government land;
- b* private land;
- c* forest land; or
- d* agricultural land.

The procurement process for different types of land is different and the title documents in favour of the SPV need to be verified. Additionally, the right to land could be ownership rights or leasehold rights (usually for a long duration and at least commensurate with the useful life of the plant). The main aim of conducting land due diligence is to ensure that the land has been acquired in accordance with the applicable local land acquisition laws, to ensure there are no outstanding historic claims on the land, and that all requisite approvals and consents for use of land for the project have been obtained by the SPV.

Another important aspect that needs to be verified is if the land title documents and related policies impose any restrictions or approval requirements for the creation of security in favour of the lenders over the project land. If prior permission is required in this regard, then it is a condition precedent to funding by lenders.

Availability of consents and permits for projects

Usually lenders would require that all the required permits for a project to develop and construct are available prior to the first drawdown. Accordingly, at this stage the lenders check if all the required government permits are available with the borrower. Some of the usual permits required by a project are as follows:

- a* environment-related clearances (such as environmental clearance, forest clearances, etc.);
- b* transmission-related clearances;
- c* water sourcing agreement with the relevant water body, etc.;
- d* land-related approvals;

- e* permission from the relevant government regulatory authority for power required during construction;
- f* approvals for import of equipment to be installed at the project; and
- g* labour approvals.

This exercise is imperative not only to prevent potential roadblocks to the timely implementation of the project but also to prevent adverse financial implications through penalties or fines imposed by government authorities in the absence of the required consents or approvals. For example, in the Indian context, in the recent case of *Common Cause v. Union of India*,² the Supreme Court of India imposed obligations on mine developers to pay compensation for carrying out mining operations without valid statutory clearances, and ordered the suspension of mining operations till the payment of compensation and the procurement of all applicable clearances.

Corporate compliance

Another aspect that is checked by the lenders is the corporate compliance of the SPV and the ability of the SPV to carry out the project (in consonance with its constitutional documents and corporate authorisations). In addition, it is a check to ensure that the lenders' rights are protected vis-à-vis the shareholders.

iii Financing and security documentation

For a project finance transaction typically, the following financing documents are negotiated between the lenders and the borrower:

- a* The facility or loan agreement: This records the detailed terms and conditions governing the financing facility being granted by the lenders. This agreement is executed among the lenders, the SPV and the security trustee (in the case of a consortium of lenders). Some of the main provisions included in a facility agreement are – the purpose of the facility, the rate of interest, disbursement-linked conditions, the amortisation schedule, the prepayment conditions, additional interest payouts for non-performance or delay etc., the security package, affirmative and negative covenants, representations, events of default, and the consequences of events of defaults, among others.
- b* The trust and retention account agreement: Since project finance transactions are based on the cash flows expected to be generated from a project, the lenders monitor and have recourse over all cash flows pertaining to the project. Accordingly, all project proceeds and project receivables are required to be routed through a trust and retention account (along with all sub-accounts) operating under a defined framework governing all inflows and outflows from the account. To record this understanding, a trust and retention account agreement (or escrow agreement) is entered to provide, *inter alia*, a detailed waterfall mechanism for the flow of the project proceeds into the various sub-accounts and the permitted withdrawals therefrom.
- c* Security trustee agreement: Typically, a security trustee is appointed by the lenders (being one of the lenders or a separate trust entity) in whose favour the entire security is

² (2017) 9 SCC 499.

created. This agreement is mainly required in consortium lendings. The security trustee agreement provides for the appointment of the security trustee and records its rights and obligations.

- d* Inter-creditor agreement: In consortium lending, an inter-creditor agreement is executed among the lenders, the lenders' agent and the security agent. Although the borrower is usually not a party to this agreement, the SPV is required to acknowledge it. The agreement mainly provides for:
- the process for enforcement of the security interest;
 - the mechanism for the sharing and application of enforcement proceeds; and
 - the provisions for the coordination and sharing of information among the lenders – *inter alia*, for the grant of waivers, credit rating of the SPV, etc.
- e* Facility agent agreement or lenders' agent agreement: In a consortium project finance, lenders appoint a lenders' agent for operational convenience and dealings with the SPV on behalf of all lenders. The facility agent agreement or lenders' agent agreement records the rights of the lenders' agent and the delegation of authority to the lenders' agent to act on behalf of the consortium.

iv Typical security package

The security package in a project finance transaction is largely limited to project assets and project receivables (with limited recourse to the sponsor or parent in most developing countries). On the other hand, corporate financing is based on the balance sheet level security (including cross collateralisation). Lenders funding projects typically require the following security package created through the security documents discussed in brief below:

- a* Movable assets – a charge on the project developer's movable assets and intangible assets created typically through a deed of hypothecation or indenture of mortgage.
- b* Immovable property – a mortgage over immovable property; the instrument for creating this mortgage is dependent on the requirements of local law. For example, in India a mortgage is created typically through the deposit of title deeds (an equitable mortgage) or through an English mortgage (i.e., where the property is transferred absolutely to the mortgagee, subject to a re-transfer obligation on repayment of the loan by the mortgagor), with the choice of mortgage depending among other things on the stamp duty payable on the instrument creating the mortgage, the state in India where the immovable property is located, the registration requirements, etc. The stamp duty on English mortgages (i.e., an indenture of mortgage) is *ad valorem* in India and higher than on an equitable mortgage.
- c* Current assets – a charge on all current assets including but not limited to book debts, operating cash flows, receivables, commissions, revenues created typically through a deed of hypothecation or indenture of mortgage.
- d* Bank accounts – A charge over project developer's bank accounts (including control over the cash flows and the agreed waterfall for the cash flow, etc.) created typically through a deed of hypothecation or deed of charge or indenture of mortgage.
- e* Share pledge – a pledge over the promoter shareholding (both equity and quasi-equity instruments) in the SPV (it is either 51 per cent, 75 per cent or 100 per cent depending on the strength of the project or promoter) created by way of an instrument of pledge along with power of attorney.

- f* Project documents – a charge or assignment by way of security interest of all present and future rights, title, interest, benefit, claims and demand of the project developer on the project documents, insurance contracts etc., created pursuant to the indenture of mortgage.
- g* Sponsor support – The security package also includes sponsor support undertakings from the parent or sponsor of the SPV in most developing nations. The extent of the sponsor support is dependent on, *inter alia*, the credit profile of the promoter, the financial model of the project and the nature of the transaction. Usually sponsor support undertakings are required to be provided for cost overruns that may be incurred by the SPV beyond the approved project cost; for the creation of a debt service reserve account to be maintained for the benefit of the lenders; to ensure the retention of ownership and management control of the SPV till the subsistence of the loan, etc.; to prevent the disposal of their shareholding in the SPV; and to address specific project-related risks such as the obligation to prepay loans in the case of underperformance, defined as the project not operating as per the banking base case. From a sponsor's perspective the drafting of the sponsor undertaking is critical and it usually needs to ensure that its liability under the undertaking is capped and does not amount to a guarantee to prepay the debt in the case of the SPV's failure to repay. Further, where the promoter is a non-resident entity, compliance with the extant foreign exchange laws of the jurisdiction in which the project is located needs to be checked to determine if there are any approval requirements for the creation of such a pledge.

We now discuss in brief some of the main terms of the financing documents.

Drawdown process – typical condition precedents

Some of the usual condition precedents (CPs) to the first drawdown of the loan are:

- a* the submission of corporate authorisations and certifications, which typically include relevant resolutions from the board of the borrower authorising borrowing and the related security creation, resolutions from the board of the parent providing security or executing a sponsor support undertaking, shareholder resolutions in connection with the borrowing by the shareholders of the SPV and the parent depending upon transaction requirements and as may be required under the provisions of company law in the relevant jurisdiction;
- b* the submission of all project documents, project consents, approval, land documents, insurance contracts and any other regulatory requirements for the project being financed;
- c* the execution of financing and security documents;
- d* the submission of financial models, etc.; and
- e* the perfection of security, although SPVs in recent times have successfully negotiated the creation of security in a phased manner with timelines identified in the financing documents, though in those cases the lenders usually cap the disbursement amount that can be availed pending perfection of entire security package;
- f* compliance reports or certificates from transactional advisers, such as engineers, lawyers, financial advisers and insurance advisers, that are usually retained by lenders to identify potential risks and ways of mitigation before disbursement; and

- g the submission of documentary evidence of the infusion of funds by the promoter, since the projects are typically funded in a contractually agreed debt-to-equity ratio, where the equity component is either required to be infused upfront or in proportion to the disbursement amount being requested.

The process for seeking drawdown is also detailed in the facility agreement. Generally, the process requires submission of the drawdown request by the SPV, with supporting documents showing compliance with requisite CPs.

Determination of debt and equity ratio

One of the specific requirements for the grant of a project finance facility is to maintain a prescribed debt-to-equity ratio so that the approved project cost is funded in that agreed proportion. Typically, the debt-to-equity ratio varies between 70:30 or 75:25 or 80:20 depending upon the risk profile of the project, banking base case, promoter strength, etc. The borrower under the financing documents is required to maintain the prescribed debt-to-equity ratio throughout the tenure of the loan. In this regard, the lenders and the borrower usually negotiate as to what would constitute 'equity'; for example, would it be only pure equity shares issued by the SPV or also the quasi-equity instruments or shareholder loans (or both). Increasingly, over time lenders do allow quasi-equity instruments to be included in the definition of 'equity' primarily for commercial and tax reasons. However, if the promoter's contribution is infused by way of quasi-equity or debt (convertible and non-convertible debentures, and preference shares), any payment to the promoter on account of debenture redemption or coupon payments are subordinated to project finance lenders.

Amortisation schedule and the loan tenor

The amortisation or repayment schedule contains the schedule of repayment of the principal loan amount advanced by the lenders. Usually repayment of the principal amount is on a quarterly or half-yearly basis. The repayment instalments are agreed as either equal repayments or different repayments over the tenure of the loan. The latter approach is preferred when a cash flow mismatch is expected in the initial years of the project.

Typically, project loans have a tenor of 10–20 years including the construction period and the moratorium recognised in the loan agreement. The duration of the loan is ascertained based on the useful life of the project, for example, some power project loans are for a duration of 22–25 years as well. The borrower usually wants the repayment schedule to be commensurate with the life of the project. The loan tenor is usually finalised based on the project financials, etc. It is pertinent to mention that in some developing nations the central bank does provide some guidance on the tenor of the project loans to ensure that the repayment burden is spaced adequately to the life of the project.

Typical representations

A borrower is required to provide a number of representations to the lenders in the financing documents, regarding valid corporate existence, conformity with applicable law, adequacy of clearances required for the implementation of the projects, etc. As representations are subject to factual determination, it varies from case to case as per the nature of the transaction, the sector of borrower's operations, etc. Certain specific representations are also incorporated based on the findings of the due diligence exercise. Breach of a representation is treated as an event of default under the loan agreement.

Some of the typical representations in a facility agreement pertain, among other things, to valid corporate existence, compliance with applicable laws (including with respect to the environment and forest-related laws) and existing contracts, no security interest (other than as disclosed), no litigation (other than as disclosed), no default, representation on project documents, insurances, compliance with approvals, availability of all required approvals, no force majeure under the project contracts having occurred, and no defaulter in the board of directors.

Under the LMA loan agreement representations provided by a borrower or obligor are typically required to be repeated on certain specified dates such as drawdown date, interest payment dates, repayment dates, etc. In the context of certain developing nations (such as India), the representations provided are typically required to be repeated on each day till the final repayment of the facility amount.

v Usual covenants

The facility agreement provides for affirmative covenants, negative covenants and financial covenants – we discuss each of these in brief below. These covenants are usually well negotiated between the borrower and the lenders.

Affirmative covenants

Affirmative covenants primarily record the continuing obligations of the SPV. Some of the usual affirmative covenants include compliance with applicable laws and clearances; the SPV's insurance and credit-rating obligations; the payment of taxes and other statutory dues; the lenders' right to inspect; the preservation of security; the constitution of the project management committee and audit subcommittee as required by the lenders; and the observer or lenders' nominee director on the board of the SPV. Further, information covenants such as the submission of audited accounts, information on ongoing or potential litigation, information on sale receivables are also incorporated as affirmative covenants. Information covenants also include, among other things, the periodic submission of information on the construction (the construction progress report), allowing periodic visits by the lenders on the project site (at the cost of the borrower), and furnishing reports by the lenders' consultants. This ensures that the lenders are able to monitor the construction and operation of the project and can determine if any action is required to be taken early on.

Restrictive covenants

Negative covenants prohibit the SPV from doing certain acts that are considered prejudicial to the lenders' interests, such as transferring assets, granting or issuing security, and incurring indebtedness (other than in favour of project lenders). Some of the typical negative covenants that would require the lenders' prior written consent include a change in management or board composition; a change in control of the SPV; the sale, transfer, lease or disposal of the assets of the SPV; the creation of security or encumbrance other than as provided in the facility agreement; incurring indebtedness, extending loans or undertaking guarantee obligations, other than as provided in the facility agreement; payments to the promoter either by way of dividend distribution, or coupon or interest payment; repayment of promoter loans; alteration to the constitutional documents; and an alteration in the shareholding pattern.

Restricted payments concept

Any dividend distribution by the SPV is allowed by the lenders only on satisfaction of certain prescribed restrictive payment conditions such as no default being in place; that all due interest

payments and repayment instalments have been paid; that the commissioning of the project has been achieved; and that there is compliance with prescribed financial ratios, with the debt service reserve amount having been created. In addition, lenders also at times provide that any dividend distribution would only be subject to the prior consent of the lenders.

The repayment of quasi-equity instruments such as non-convertible debentures, or the payment of interest or the principal amount of shareholder loans is usually subordinated to project finance lenders. However, in certain instances lenders may agree to repayment of interest on debentures or shareholder loans being permitted subject to their prior consent and the prescribed restricted payments conditions being met.

Financial covenants

Financial covenants are an important aspect of the financing agreements and effectively reflect the financial health of the SPV and sustainability of the lenders' exposure. Some of the most common financial covenants included in the loan agreement include debt service coverage ratio (which evidences the serviceability of the financing), debt-to-equity ratio and fixed asset coverage ratio. The method of computation of each of these financial covenants along with the specific definitions are commercially agreed and incorporated in the facility agreement. Financial covenants are typically monitored on a year-on-year basis pursuant to information provided in the audited financial statements by the borrower; with the first testing of these financial ratios being at the end of one full year of operation of the project. Non-compliance with the agreed financial covenants thresholds usually entitles the lenders to charge additional interest, change the pricing of the loan (margin or spread) and declare an event of default.

Events of default and consequences thereof

The facility agreement provides for a list of borrower's events of default that entitle lenders to exercise certain rights such as the right to accelerate repayments and enforce security interests. Some of the typical events of default provided for in a facility agreement include non-payment of principal or interest, non-compliance with covenants, misrepresentation, inadequacy of security, invalidation of clearances or government approvals, change in control, breach of applicable laws, breach of financial covenants, and initiation of insolvency proceedings. An important question with regard to events of default is whether a cure period is to be provided to a borrower. While lenders usually do not agree to blanket cure periods for all events of default, cure periods for specific events are generally negotiated and included.

Upon the occurrence of an event of default, the lenders (subject to the provisions of the inter-creditor agreement in consortium funding) are entitled to exercise any or all of their rights to the enforcement of the security interest; the acceleration of repayment; and the conversion of outstanding debt into equity shares (if provided for in the facility agreement). Additionally, the lenders are entitled to exercise all their rights under the applicable law. In the Indian context, for example, that would include takeover of the management of the borrower under the Securitisation and Asset Reconstruction and Enforcement of Security Interests Act, 2002, initiation of insolvency proceedings under Insolvency and Bankruptcy Code, 2016, and taking steps or corrective measures under the regulatory framework provided by Reserve Bank of India such as the Resolution of Stressed Assets – Revised Framework dated 12 February 2018.³

3 <https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11218>.

BOND MARKETS AND DEBT PLACEMENTS

David Armstrong and Robert Warfield¹

I INTRODUCTION

Project bonds have been a critical source of debt financing in the project finance space for many years. Most commonly, a project sponsor will seek to issue project bonds to refinance existing bank debt to provide long-term funding for projects that have already reached a relatively stable and predictable stage of operation.

Unsurprisingly, these refinancings are far from the only example of project bond issuances, as the details of each issuance, sponsor and transaction will dictate variations. For example, investors in project bonds do not shirk away entirely from purchasing bonds that fund projects that are still under construction. Additionally, project bonds can be issued by the project company (i.e., the entity that directly owns the project being financed) or by a holding company that indirectly owns one or more projects to finance a portfolio of operating assets or to take advantage of a structurally subordinated repayment obligation akin to back-leveraged bank debt. And, though they may seem slight to an outside observer, there are substantial differences between the types of bond issuances that predominate in the market and the rules that govern them, which in turn have procedural and legal implications for the pool of investors, the disclosures that precede the issuance, and the covenants and governance structure of the transaction itself after the bonds are issued and effective.

This chapter provides an overview of key features of project bond issuances, encompassing those features that are common to any issuance (including the important financial terms, the general approach to covenants and monitoring, and the role of diligence and credit support) and how the nature of a project bond transaction affects those key features, with a focus on the procedural and substantive differences that distinguish offerings made under Section 4(a)(2) and Rule 144A of the Securities Act – the two principal safe harbours for issuing project bonds that are exempt from registration under the US securities laws.² Tangential to that discussion will be a focus on intra-bondholder

1 David Armstrong is a partner and Robert Warfield is an associate at Skadden, Arps, Slate, Meagher & Flom LLP.

2 Although project bonds are, of course, frequently issued under the laws of several jurisdictions around the world, this chapter focuses on these two types of project bonds, which constitute (together with offerings under Regulation S, which provides a Rule 144A-like safe harbour for placements to qualifying non-US persons) the predominant forms of project bond issuances in terms of worldwide dollar value and provide, in our view, the most useful illustration of the issues associated with project bonds generally.

and inter-creditor issues, along with potential workarounds and compromises, in the context of administering a given transaction. The chapter will also discuss project bonds in comparative terms to bank debt financings.

II MARKET OVERVIEW

Over the past five years, the project bond market both in the US and globally has been an increasingly active space, with year-to-year variations. For instance, according to materials published on Practical Law, the aggregate dollar amount of project bonds placed by US issuers has risen from approximately US\$7.1 billion in 2012 to approximately US\$18.8 billion in 2017. Though the US market was the largest by project bond volume in 2017, project bonds were issued in high volumes across all regions in 2017: worldwide issuances totalled US\$64 billion in the aggregate (up from US\$44 billion in 2016; by comparison, global project bond volumes suffered a recent low of US\$9 billion in 2009 following the financial crisis), while issuances in North America (including the US, Canada and Mexico), Latin America, EMEA (Europe, the Middle East and Africa) and Asia-Pacific regions each saw increased volumes compared to 2016.³ Information available for project bond offerings in the first half of 2018 is available, and does suggest a drop-off: in the US, about US\$4.8 billion in project bonds were issued by US entities in the first half of 2018, as compared with US\$8.9 billion in the corresponding period in 2017.⁴ Notwithstanding the decrease in issuances, project sponsors were still seeking access to the international bond markets, illustrated by the following example transactions, each of which closed in 2018:

- a* the US\$1.2 billion senior lien revenue bonds for the automated people-mover project at the Los Angeles International Airport;⁵
- b* the US\$1.5 billion Rule 144A and Regulation S offering for the Sabal Trail gas pipeline (owned by a joint venture among Spectra, NextEra and Duke Energy) running through Florida, Georgia and Alabama, which consisted of three tranches of notes (with 10-year, 20-year and 30-year maturities, respectively);⁶
- c* the aggregate US\$498.7 million Section 4(a)(2) private placement, funded over two closings, by a subsidiary of sPower to fund operations of a portfolio of 16 solar projects in California and Idaho, which followed a US\$421.4 million Section 4(a)(2) placement in 2017 by another subsidiary of sPower to fund a portfolio 39 solar projects and two wind projects located in seven states across the US;⁷
- d* the US\$1.4 billion 12-year senior secured notes issued in the US private placement market to refinance a coal seam gas to liquefied natural gas project located in Queensland, Australia owned by a joint venture of ConocoPhillips, Origin Energy and Sinopec;⁸

3 Source: 'Project Bond Fundamentals – The Global Project Bond Market', by Crédit Agricole Securities as of May 2018.

4 Source: 'US Project Finance Round-Up: Mid-Year 2018', by Practical Law Finance as of 9 August 2018.

5 Source: *ibid*.

6 Source: *ibid*; 'Sabal Trail Transmission, LLC Announces Pricing of \$1.5 Billion Debt Offering', 30 April 2018, by Spectra Energy Partners, LP via PRNewswire.

7 Skadden, Arps, Slate, Meagher & Flom LLP represented Citigroup Global Markets Inc. as lead placement agent in both sPower transactions referenced.

8 Source: 'Global Project Bonds Market Overview', by Credit Agricole Corporate and Investment Bank, as of November 2018.

- e* the £550 million issuance to refinance existing debt of a waste-to-energy plant operator based in London;⁹ and
- f* the 220 million reais issuance of 16-year senior secured notes to finance a 192MW solar PV project in Minas Gerais, Brazil, sponsored by EDF Energies Nouvelles and Canadian Solar and enhanced by a 315 million reais guarantee provided by multilateral agencies IDB and IDB Invest and a tax-exempt infrastructure debenture.¹⁰

In recent years, the general trend has seen pricing on investment grade project bonds grow more competitive with commercial bank or term loan A financings (which are traditionally lower-priced than financings in the term loan B market). Observers attribute this convergence to rising interest rates and to the gradual implementation of the Basel III international banking regulations, which have been implemented to varying extents globally but have broadly tightened banks' minimum capital requirements to protect against cyclical macroeconomic changes and led to minimum leverage ratios that protect against over-borrowing.¹¹ As a result, the ability to lock in a long-term fixed rate coupon on a project bond, even if prevailing rates in the capital markets may have been higher than the bank market until recently, has attracted project sponsors to the bond markets in an environment where banks' cost of borrowing has increased. Moreover, while transaction costs associated with bond issuances, including the payment of ratings agency fees and the potential for negative carry in funding construction projects, have not diminished, those transaction costs are less of a deterrent in a Basel III universe. Further, the pool of institutional investors has been growing as of late, introducing another means of making bond pricing more competitive.

III COMMON FEATURES OF PROJECT BOND ISSUANCES

Regardless of how any project bond is issued or the pool of investors the issuance attracts, certain key features are common to or strongly associated with any project bond offering, which distinguish project bonds in particular from bank financings. Six commonalities among project bond offerings are described in Section III.

i Fixed-rate issuances

Project bonds typically bear interest at a fixed rate, commonly referred to as the coupon, which is the most obvious factor distinguishing project bonds from bank debt in project finance circles. In an ideal project bond placement, the fixed-rate coupon benefits both project sponsors and bond investors. On one hand, the sponsors lock in a fixed price of debt proceeds, generally over a longer term than banks offer and without susceptibility to fluctuations in interest rates or any step-up in margin that is a common component of longer term bank financings. The fixed-rate nature of the bonds also obviates the need to enter into interest rate hedges and monitor breakage costs. As mentioned above, project bonds are most commonly issued in the refinancing context; that is, sponsors often avail

9 Source: *ibid.*

10 Source: *ibid.*

11 Sources: 'Sources of Available Project Financing: Project Bonds', by Edward Neaher and Sean Johnson with Practical Law Finance, accessed on 25 January 2019; 'Project Bonds: An alternative source of financing infrastructure projects', Deloitte, accessed on 25 January 2019.

themselves of bond markets precisely to avoid pricing fluctuations once the markets have determined the sponsors' cash flows are sufficiently stable. On the other hand, the types of institutional investors who are repeat participants in project bond issuances – the insurance companies, pension funds and other asset managers who will be referenced throughout this chapter – prioritise the ability to receive a reliable source of income, exemplified by the bond coupon.

ii Longer tenors and amortisation profiles

From an investor's perspective, the relatively lengthy tenors of project bonds complement their fixed pricing. Project bonds frequently amortise over long periods ranging from 10 to 30 years; for instance, the sPower issuances referred to in Section II above have 18- and 24-year maturities, respectively, and offerings often consist of tranches with different maturities and different coupons (as with the Sabal Trail offering discussed in Section II). By comparison, term loans financed with bank debt will usually have tenors of just a handful of years, and almost always less than 10 years. Insurance companies, pension funds and asset managers all retain long-term liabilities by the nature of their respective businesses, and so the long tenor of fixed-rate debt provides these investors with a predictable investment that offsets these liabilities. Another consequence of the longer terms of project bonds is an amortisation profile that features a smaller balloon payment at maturity than would be found in a shorter term bank financing of a similar quantum. Bank financings are designed to be refinanced at the end of their terms, whereas bond financings are often fully amortising. With project bonds, this reduces refinancing pressure on sponsors, and, as indicated above, a sponsor seeking access to capital markets is signalling to investors that it is prepared to accept long-term financing of its assets. The maturity and amortisation profiles of project bonds thus line up neatly with what is considered a key tenet of project finance (though it is not without exceptions): for a project to be financeable, it requires a long-term, predictable source of steady revenues, typically by means of one or more offtake contracts that pay the project for its products or services. To wit, bonds have been a common source of financing in the LNG and certain power sectors, where offtake contracts can have terms of 15, 20 or even 25 years. Bond investors, as the typical maturity profile indicates, are comfortable with a minimal cushion between a bond's maturity date and the scheduled expiration of the relevant project's revenue contracts. In rare cases, bond investors will even accept a merchant tail at the end of a bond's maturity (i.e., a scenario where a project's revenue contract expires before the bonds mature), depending on the projected strength of the market for the project's products or services, the likelihood of extension of the offtake contracts, and the expected life and performance of the project assets.

iii Aversion to prepayments; make-whole

Bond investors are generally averse to prepayment, given their focus on long-term yield as borne out through the amortisation profile discussed above – another reason why project bonds are more frequently used to take out bank debt than vice versa. As such, an issuer typically must accompany any optional prepayment of the bonds with a make-whole payment of the scheduled remaining payments of principal and interest on the amount prepaid, discounted to present value. Additionally, the list of mandatory prepayment events may be shorter in bond issuances than bank facilities, though prepayments following casualty events, material asset sales and suspended distributions are relatively standard. In many cases, and especially following a material asset sale, investors will require a premium

on such mandatory prepayment if not a make-whole. Complicating matters, the procedure for distributing prepayments among investors now often requires, particularly where international purchasers are in the investor pool, that prepayment proceeds first be offered to the investors and then distributed among those who accept the offer, owing to recent changes in the regulatory landscape.

iv Ratings

Investors will typically require that the bonds receive a rating from one or more ratings agencies. The ratings agencies also play a key diligence role in the investors' evaluation of the offering: as discussed elsewhere in this chapter, bond investors (and especially investors in Rule 144A offerings) are less involved in monitoring an issuer's compliance with debt terms than banks, and always rely heavily on ratings agencies' assessment of a given project. The number of ratings required will depend on the nature of the placement: multiple ratings are more likely to be required in Rule 144A offerings, where investors' role in diligence is even further removed than that of investors in Section 4(a)(2) placements, which frequently close with only one rating.

v Looser, incurrence-based covenant package

As mentioned above, relatively loose covenant packages that allow for more flexibility for the issuer (as compared to bank financings) are common features of bond terms. Broadly speaking, we can attribute this feature to an investor pool in project bond issuances (and particularly in issuances that qualify for the Rule 144A safe harbour) that is likely to be more diffuse and passive, and to place a greater emphasis on timely payment of a coupon as an investment strategy, than a banking syndicate. Though any project finance transaction, be it a bond or a bank financing, will include covenants that require the issuer to maintain the financed project as a going concern or are tailored to unique features of the financed project, the key covenants in project bond documents are more typically 'incurrence'-based, in that they depend on an event's occurrence or a specific action by the issuer. While incurrence-based covenants are of course prevalent in bank financings too, in the context of bond financings, these incurrence-based covenants and compliance therewith depend heavily on qualifiers, objective thresholds (i.e., thresholds that must be exceeded before the issuer is in breach) and rating agency reaffirmations. A more practical reason underlying the looser covenant package in bond financings can be found in the relative investment philosophies of deal teams at institutional investors (which are typically small in number and whose investments stretch across a breadth of unrelated products) and at banks (which may have a small handful of financiers and a greater degree of specialisation in project finance and sub-markets in the project finance space). There is an obvious downside to the looser covenant package and lesser oversight by bond investors: should any waiver or approval become a necessity, there will likely be high transaction costs involved in obtaining that waiver or approval. We will revisit the subject of bond document covenants and the greater administrative difficulties in Rule 144A transactions in Section V.

vi Tendency towards operating projects

A final feature that typifies, but does not exclusively define, project bonds is the sponsors' tendency to seek bond financing for projects that are already operating, as opposed to those that are under construction. For starters, projects that can demonstrate at least a minimal operating history will be immediately more attractive to project bond investors because

of the greater confidence in steady, long-term revenues that operating history can help predict. From another angle, construction projects bring a risk of negative carry: bonds are typically funded all at once (or occasionally with limited delayed draw features), meaning that the bond coupon will exceed whatever low-yield investments the issuer makes with the bond proceeds until after the project reaches operation and generates sufficient revenues. Deal parties can ameliorate the risk of negative carry by introducing delay-draw mechanics into the bond documents, such that this risk can be spread out more evenly over the construction period, but even a well-oiled delay-draw mechanism is likely to be less flexible than the banks' ability to process construction requisitions and to fund draws on a purely as-needed basis. Construction projects with risks that are easily understood or that are enhanced by completion guarantees or other forms of credit support are likely to increase their appeal to bond investors.

IV TYPES OF PLACEMENTS

In the US, project bonds are securities that are subject to the Securities Act of 1933, Exchange Act of 1934 and Trust Indenture Act of 1939, and the rules and regulations promulgated thereunder. Unless an exemption is available, issuers are required to register the project bonds to be sold and traded, and become subject to the same extensive disclosure requirements that govern any public securities sale. Though project bonds can, of course, be traded publicly, when preparing for an issuance project sponsors typically seek to take advantage of either the private placement exemption available under Section 4(a)(2) (for 'transactions by an issuer not involving any public offering') or the safe harbour available under Rule 144A. These two exemptions afford sponsors and issuers the ability to avoid some of the more stringent disclosure requirements of US securities laws (and, importantly, to provide certainty around timing of closing),¹² but issuances under these two safe harbours do differ markedly on points of procedure and substance, as do issuers' and investors' roles in analysing the bond terms. This section highlights distinguishing features of Section 4(a)(2) and Rule 144A placements, which will be revisited in the discussions of the investor pool and approaches to covenant administration found in Section V.

i Section 4(a)(2) placements

To meet the requirements of the Section 4(a)(2) private placement exemption, the purchasers of project bonds must be sophisticated investors that can evaluate the risks and merits of investment in the project bonds and bear the economic risks of the investment. There are no limits to the amount of project bonds that can be offered under the Section 4(a)(2) exemption, and Rules 506(b) and (c) of Regulation D provide a safe harbour for qualifying issuers to sell the project bonds to an unlimited number of 'accredited investors' (defined in Rule 501 of Regulation), plus up to 35 non-accredited investors if an issuer is relying on Rule 506(b). The insurance companies, pension funds and other institutional investors

¹² As noted, project bonds are overwhelmingly issued on a private, rather than, public basis. However, as a means to add to the pool of potential investors and improve the liquidity of project bonds, Rule 144A project bonds are occasionally issued with 'registration rights,' which require the project company to register the project bonds with the SEC within a certain period of time after closing. After such registration, the project bonds are publicly traded, subject to the extensive ongoing reporting requirements referenced herein.

that are repeat purchasers of project bonds will meet the accreditation threshold. Though the number of accredited investors is theoretically unlimited in a Section 4(a)(2) private placement, issuers may only engage in general solicitation or marketing of the project bonds in certain circumstances, and satisfaction of the Rule 506(b) or (c) safe harbour also requires issuers to take certain steps to confirm the accredited investor status of investors in the offering. Bonds purchased under the Section 4(a)(2) exemption are 'restricted securities' under US securities laws that may not be resold unless they are registered or the resale qualifies for an exemption therefrom. Section 4(a)(2) investors generally seek to buy the bonds with an eye towards long-term investment and will typically make a representation in the applicable bond documents that they are not purchasing the bonds with a view towards distribution.

As a result, Section 4(a)(2) investors generally have a more involved role in carrying out due diligence of projects that are the subject of the bond issuance and in commenting on the bond documents than Rule 144A investors would. In addition to the Section 4(a)(2) investors' long-term view of the investment and the traditionally smaller pool of investors in a Section 4(a)(2) offering – which manifests in a larger role in compliance monitoring compared to Rule 144A investors, as will be discussed in Section V – the Section 4(a)(2) investors' level of involvement is distinguished from that of Rule 144A investors by the absence of Rule 10b-5 liability (discussed in more detail below) of the investment banks that act as initial purchasers, which is a main driver of the Rule 144A diligence process.

In a Section 4(a)(2) private placement, project bonds are sold directly to the purchasers, rather than purchased by an initial purchaser who then makes a secondary sale to the ultimate investor in a Rule 144A offering. A placement agent will often be retained to market the project bonds to the prospective investor pool and will assist the project sponsor in developing the financial model and other technical reporting, distributing diligence materials and preparing an investor presentation and private placement memorandum to be shared with the prospective investor class. The placement agent will not purchase the project bonds for its own account and so does not act as an underwriter or initial purchaser, which is how the placement agent may avoid liability under Rule 10b-5 of the Exchange Act (prohibiting any person from making an 'untrue statement of material fact,' in the language of the rule, in connection with the purchase or sale of securities). Predictably, the diligence materials (including the private placement memorandum) that a placement agent has a hand in preparing will be less fulsome than an offering memorandum drafted for a Rule 144A offering, where 10b-5 liability is a factor.

The trade-off for the placement agent's lack of 10b-5 liability in marketing a Section 4(a)(2) placement is a lengthier period for the investors to conduct their own diligence and to review the draft bond documentation. In addition to the draft bond documents, the investor materials will contain financial projections, technical information, a short-form term sheet for the bond documents and material terms of project documents. But, to drill down beyond the elemental information regarding a project that is usually found in Section 4(a)(2) marketing materials, deal teams at Section 4(a)(2) investors will typically involve their own in-house counsel to review the financing documentation and engage in a prolonged question and answer diligence exercise that involves the sponsor, placement agent, their respective counsel and other independent advisers. In the Section 4(a)(2) context, review and comment periods between indications of interest from investors through submission of bids and pricing to execution of bond documents can extend for upwards of six weeks to two months, depending on the nature of the transaction.

Investors and issuers can also expect lengthy diligence periods where bonds are issued by a holding company to finance a portfolio of projects, which may involve different offtakers and different revenue contracts. When project bonds are issued in the renewable space (where tax incentives and credits drive a significant amount of investment), Section 4(a)(2) investors will also need to grapple with any tax equity arrangements that are also used to finance the subject projects, since tax equity investors may have preferred rights in certain cash flows if the bondholders are structurally subordinated.

ii Rule 144A placements

Rule 144A provides for a safe harbour from the Securities Act registration requirement for resales of securities (including project bonds) to 'qualified institutional buyers'. The qualified institutional buyer cannot be a natural person – it must be an institutional investor – and it must be an 'accredited investor' under Rule 501 of Regulation D that, in the aggregate, owns and invests on a discretionary basis at least US\$100 million of securities of unaffiliated issuers. Similarly, the pool of Rule 144A investors is theoretically unlimited, though the qualified institutional buyer rule limits the pool from the offering's outset and the rule places certain confines around the number of securities that can be sold to investors affiliated with the issuer.¹³

Rule 144A only applies to resales of securities, so to take advantage of the Rule 144A safe harbour, an issuer sells the project bonds to one or more financial institutions acting as initial purchasers, who then resell the bonds to the qualified institutional buyers described above, and it is these resales that qualify the transaction for the Rule 144A exemption. The project bonds sold in this manner are also restricted securities, but can be freely traded among qualified institutional buyers in another Rule 144A resale. This established pool of qualified institutional buyers often distinguishes Rule 144A placements from their Section 4(a)(2) counterparts in that the bonds sold are inherently more liquid. (Purchasers in Rule 144A placements can also resell bonds to non-qualified institutional buyers through another available exemption from registration under the Securities Act in what has become known as the 4(1-½) exemption, so long as the resale is sufficiently private and the new purchasers intend to hold the bonds.) This increased liquidity among qualified institutional buyers that is part-and-parcel with Rule 144A resales can result in a pool of investors that does not have a view towards long-term investment and instead takes a mark-to-market approach with the bonds. However, for the most part, investors in Rule 144A project bonds do generally have a view towards long-term investment, and the trading in Rule 144A project bonds is relatively limited (particularly if the project performs in a stable manner over the life of the bonds).

13 Where purchasers of project bonds are located outside the US, a safe harbour for resales similar to that established under Rule 144A is available under Regulation S (Reg S), which provides an exclusion from the Securities Act's registration requirements for offers and sales of securities outside of the United States. Satisfaction of the Reg S safe harbour requires that the offer be made in an 'offshore transaction' and that no 'directed selling efforts' be made by the issuer, a distributor, any of their affiliates or any other person acting on their behalf. When international purchasers are involved, Rule 144A transactions are typically structured as a combined Rule 144A and Reg S offering (though an issuer can structure an offering that solely involves non-US purchasers under Reg S). Because of the substantial structural and procedural overlap between Rule 144A and Reg S issuances, we have focused on Rule 144A offerings for the sake of simplicity.

Unlike Section 4(a)(2) placements, the financial institutions acting as initial purchasers will have potential 10b-5 liability in a Rule 144A-eligible transaction, since they act as intermediaries between issuer and the subsequent purchasers in the resale. This results in a significantly more comprehensive offering memorandum, usually hundreds of pages long for project bonds, describing, among other things, the risk factors involved in the issuance itself and the subject project's operations and contracts, and the terms and conditions of the bond documents in greater detail than would be found in a Section 4(a)(2) private placement memorandum. Disclosure materials will generally be accompanied by a comfort letter from the issuer's auditors and a '10b-5 letter' from counsel, which are issued in favour of the initial purchasers; the 10b-5 letter provides a negative assurance that, based on the work undertaken by counsel, counsel has no reason to believe the disclosures contain an untrue statement or omission of material fact. The trade-off calculus in the diligence process is therefore much different in a Rule 144A transaction as compared to a Section 4(a)(2) issuance: in exchange for the more extensive disclosure and consultants' assurances, potential investors are given a much shorter period to review diligence materials, will often not involve in-house counsel and will be expected to make very few, if any, comments to the financing documentation.

V PROJECT BOND INVESTORS: APPROACH AND ADMINISTRATION

Certain types of institutional investors are more likely to be repeat players in the project bond markets. Insurance companies are an obvious example, and are more likely to purchase project bonds for long-term investment. Pension funds and other large asset managers also help fill the pool, and are more flexible with the increased liquidity features of a Rule 144A resale. Increasingly, infrastructure debt funds have begun investing in project bonds. Depending on the jurisdiction in which the issuer is organised, local investors may be called upon, or even required, to invest in cross-border issuances of project bonds, which may have currency restrictions.

In the project finance market, the investor pool is almost certain to be composed of a mix of the foregoing types of investors, and many of the institutions participate in both Section 4(a)(2) or Rule 144A-eligible transactions. However, the deal teams at those institutions who participate in both of these types of project bond transactions will come from different desks at the applicable institution, depending on whether the transaction is structured to satisfy Section 4(a)(2) or Rule 144A. As mentioned above in Section IV, an investor's Section 4(a)(2) deal team is much more likely to involve internal counsel, and the analysts will be expected to have a greater degree of familiarity with the types of assets that are typically financed in project bond markets, given the longer review period and larger diligence effort required of the investor. An investor's Rule 144A deal team may have a more generalist approach, focused on a wider pool of investments.

When compared to banks that lend in the project finance markets, institutional investors generally take a more passive role in monitoring a project's performance and compliance with the bond documents, a truism that applies especially to purchasers of bonds issued under a Rule 144A placement. Institutional investors, as can be expected given the nature of their businesses, will broadly remain hands-off unless and until their yield is imperiled. This more passive approach provides issuers with a carrot (less desire on the part of the investors to oversee compliance) and a stick (investors' relative inflexibility in changing market-standard covenants and granting waivers when oversight becomes

necessary, plus difficulty in managing and keeping track of current holders of the project bonds, especially in the context of a Rule 144A transaction). As intimated above, this carrot-and-stick feature is significantly more prominent in placements under Rule 144A, since the holders of Section 4(a)(2) bonds are likely to be relatively manageable in number and typically also have a deeper knowledge both of the financed project and the assets in general, and so will be more flexible in granting waivers and negotiating defaults.

As is to be expected, at least with respect to Rule 144A placements, covenants in an indenture or other governing bond documents are more likely to be looser and issuer-friendly than those in bank debt transactions.¹⁴ As noted above, Rule 144A investors can accept looser covenants than bank lenders or even Section 4(a)(2) investors would, since their ongoing role in project administration is limited, for reasons of practicality among others. One practical reason for the looser covenant package in Rule 144A transactions is the more formal and administratively burdensome process for seeking bondholder consent in those deals. This administrative difficulty is driven both by the greater changeover in bondholders, making those bondholders more difficult to locate and contact, and by the formal procedure for soliciting and granting consents, approvals and waivers that will be formalised in the bond documents unless the investor pool is very small. The process for obtaining approvals and waivers from holders in Section 4(a)(2) placements, though not without its challenges, is closer in process to obtaining approvals or waivers from a bank syndicate. Regardless of the transaction, the procedure for soliciting and obtaining consents is made more efficient by the general incurrence-based nature of the covenant package typically found in project bond offerings, which incentivises an issuer to seek a given consent or approval before they take action that would test a covenant's limits.

In any project bond transaction, and especially Rule 144A-eligible issuances, the deal teams on both the issuer and the purchaser sides are incentivised to create objective (but mutually acceptable) carve-outs from bond covenants, to avoid requirements to seek investor approval for immaterial matters and to consider creating certain agency or representative roles to increase administrative efficiency. The first and most obvious workaround to achieve these incentives focuses on drafting the covenant package: for example, many covenants in project bond documents will be qualified by 'material adverse effect,' the definition of which is often the subject of negotiations. Conceptually, however, 'material adverse effect' varies from project to project and sponsor to sponsor; and, because of its openness to interpretation and dispute, is perceived as being sponsor-favourable in affording issuers wide latitude in covenant compliance. As an alternative (and more objective) means of qualifying covenant compliance, the parties can stipulate that a specific monetary or other quantitative threshold be exceeded before the covenant is triggered. Even for Section 4(a)(2) investors that are well equipped to monitor, and that often require, narrowly tailored and project-specific covenants, these objective carve-outs and thresholds are also likely to be attractive. For instance, where a Section 4(a)(2) placement finances a portfolio of more than a dozen projects, investors can take advantage of the relatively long comment-and-diligence period prior to closing to help determine what projects are critical to operations and ultimately, repayment. This could involve negotiation of the 'material adverse effect' definition to mean a material adverse effect that affects a specific percentage

14 However, in transactions where both bonds and bank debt are present, common terms may be established or the inter-creditor arrangement may cause the facilities' covenants to converge – see Section VI of this chapter.

of the project or portfolio being financed, or the negotiation of specific covenants and deliverable requirements that pertain only to individual projects, which in each case would lighten the investors' cost of monitoring compliance.

Unsurprisingly, the project bond covenant package in both Section 4(a)(2) and Rule 144A placements has become comparatively standardised with time, and bond investors will be wary of deviations from what they consider customary language. For example, in connection with a Section 4(a)(2) placement, purchasers' counsel will frequently be asked to prepare a memo that highlights differences in a proposed draft purchase agreement from a model form, such as the one published by the American College of Investment Counsel; in connection with a Rule 144A-eligible sale, the terms and conditions of the financing will be set forth in extensive detail in the offering circular.

As another workaround, because investors in either Section 4(a)(2) or Rule 144A placements of project bonds will almost certainly require that the issuer receive a rating for those bonds, the parties can agree in the documents to deem that investor approval will have been received if the bonds' rating is reaffirmed in connection with a desired action or outcome. Another solution is to establish roles that make administration more closely resemble those found in bank debt transactions. This could involve the appointment of an agent for roles of varying scope but that nonetheless improve efficiency: examples include a notes agent appointed by the issuer who maintains the bondholders' register on the issuer's behalf (thus improving communication inefficiencies) and makes payments on the bonds directly to the bondholders, a monitoring intermediary who assists the bondholders in making procedural decisions (and who may have had experience acting as a monoline insurer, which were commonly used in bond transactions to provide a credit wrap for bond issuances prior to the 2007 to 2008 financial crisis) or, in rare instances, a bondholder representative who is appointed by the bondholders to act on their behalf in granting waivers and amendments.¹⁵

VI INTER-CREDITOR ISSUES

Projects financed by a mix of bonds, bank debt or export credit agency (ECA) debt (or both) will require an inter-creditor agreement to govern the relationship among the different debt facilities. The effect of the inter-creditor arrangement on the typical project bond financing depends on the relative sizes of the multiple credit facilities, whether the financing parties want to establish common terms that will govern across all facilities, and where the parties land on voting. In a scenario where bondholders and other lenders agree to establish common terms, the bondholders (especially, again, bondholders in a transaction exempt under Rule 144A) should theoretically benefit from a tighter-than-normal covenant package, since the bank lenders can be expected to require tighter and more bespoke covenants than the bondholders would require independently. This can be a burden on the issuers, especially in a scenario where creditors' approval or waiver is needed but the bondholders are the majority creditor. A commonly seen modification to this approach is to have a set of common terms, but to limit the provisions in respect of which bondholders may vote. This leaves a greater degree of control in the hands of bank lenders, which reduces the burden on issuers seeking approvals or waivers.

¹⁵ Regardless of the scope, the agent's or representative's fees will be an added (if minimal) cost to the transaction.

Another modified common terms approach is possible, whereby the debt facilities each have separate agreements and no common terms agreement is executed, but the required lenders or holders in one facility can decide to amend a provision in that facility and ‘drag along’ the lenders or holders in another facility who have a corresponding provision. In this modified approach, the facilities should stipulate certain fundamental provisions that cannot be dragged along. For example, bondholders may be particularly mindful of any changes to certain critical negative covenants (e.g., the incurrence of additional debt, especially where bondholders are a majority senior creditor) and compliance obligations on issuers, and seek to prevent other creditors’ ability to make those changes via the drag-along.

The presence of ECAs alongside bonds in a project finance transaction also introduces thorny inter-creditor issues, since ECA lenders may have policy-specific reasons for pursuing a certain course of action. ECA lenders commonly seek to negotiate certain ‘golden’ votes that allow them to veto the bondholders’ or other creditors’ decisions.

VII ROLE OF CREDIT SUPPORT

Where bondholders are attracted to stable, predictable projects, the presence of credit support can make riskier projects more palatable to the bond markets. This is particularly true in infrastructure bond markets, where the establishment of public-private partnerships or the financial support of a governmental or quasi-governmental development bank or guarantee programme can lend credibility and financial assurance to investment in a project, even during the construction stage. In the United States, an example is the US Department of Transportation’s credit enhancements available under the Transportation Infrastructure Finance and Innovation Act (TIFA), which allows project sponsors seeking access to capital markets to benefit from direct loans, loan guarantees and standby lines of credit from the federal government for qualifying projects. In Europe, a similar role is performed by the European Investment Bank, which provided €18 billion to support infrastructure projects in 2017. Bondholders investing in projects that are recipients of credit from governmental or quasi-governmental entities should be aware that these entities may have very little flexibility in negotiating an inter-creditor arrangement.

Credit support is especially important in developing markets and often takes the form of governmental involvement in guaranteeing a portion of the investment or in sponsoring the relevant project itself (generally through a state-run entity). Cross-border projects seeking access to the bond markets can also benefit (or suffer) from the credit rating of their host countries, which will be seen in many cases as a proxy for the creditworthiness of the project itself. Sponsors in less creditworthy jurisdictions will thus need to develop a robust history of constructing and operating reliable projects and seek out strong counterparties, to have a chance of exceeding their host country’s own credit rating and attracting cross-border investment.

VIII CONCLUSION

In sum, in the current economic environment that continues to support issuances of project bonds, not just in refinancing operating projects but also sufficiently financeable construction projects, prospective issuers and institutional investors alike need to avail themselves both of the exemptions to registration that govern project bond issuances and of the expectations for diligence, documentation and administration that accompany them.

As an added layer, in larger projects, bondholders will need to develop an understanding of how the bond terms compare to those of other debt facilities, and both bondholders and issuers will need to understand the consequences of the creditors' established voting system, which may be established for political as well as economic reasons. Overall, sponsors must be mindful of what features attract institutional investors to project bonds – be they a project's expected future performance that maximises bondholder return, a mutually acceptable covenant package that maximises administrative efficiency in a market not known historically for well-defined administrative roles, or the availability of other credit that a project can obtain to spread risk.

MULTILATERAL LENDERS AND REGIONAL DEVELOPMENT BANKS

*Ana Carolina Barretto and Amanda Leal Brasil*¹

I GENERAL ROLE IN PROJECT FINANCE

Multilateral development banks and regional development banks (MDBs) are international financial institutions created by a group of countries with the primary function of mobilising finance, knowledge and expertise to address the biggest challenges faced by developing countries, including poverty and environmental problems. MDBs are creations of multiple nations and the main features for distinguishing among them is the composition and number of member countries,² and the region for which financial assistance and the promotion of economic and social development is made available.

The most well-known multilateral development banks are: the World Bank, the European Investment Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the Development Bank of Latin America, the Inter-American Development Bank Group (IDB), the African Development Bank and the Asian Infrastructure Investment Bank. Among the most recognised regional development banks are the Eurasian Development Bank and the East African Development Bank. Each of these institutions has its own role in helping to design and coordinate approaches relating to global and regional development issues.

As set out in a paper jointly prepared by several MDBs and endorsed by the World Bank and the International Monetary Fund for the Development Committee³ meeting of April 2015, the world needs to move ‘from billions to trillions’ of dollars in order to meet the international community’s need to maximise finance for development and meet the 2030 Sustainable Development Agenda⁴ and the relevant sustainable development goals (SDGs), such as promoting social inclusion, sustainable growth, reducing poverty and inequality, and protecting the planet.

1 Ana Carolina Barretto is a partner and Amanda Leal Brasil is an associate, at Veirano Advogados.

2 The United States is a member, and donor, to five major MDBs: the World Bank and four regional development banks, including the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, and the Inter-American Development Bank.

3 The Development Committee is a ministerial-level forum of the World Bank Group and the International Monetary Fund for intergovernmental consensus-building on development issues. The Committee advises on critical development issues and on the financial resources required to promote economic development in developing countries. Over the years, the Committee has interpreted this mandate to include trade and global environmental issues in addition to traditional development matters.

4 On 1 January 2016, 17 SDGs came into force aiming to end poverty, fight inequalities and tackle climate change. Available at <https://www.un.org/sustainabledevelopment/development-agenda/>.

In this context, the MDBs coordinate with each other through many working groups to address practical issues across the development landscape, supporting and engaging in partnerships and platforms for a broader cooperation across multilateral, regional, national and bilateral development institutions and NGOs.⁵

The worldwide landscape requires agility, innovation, new players in the development space, new technologies and financing models to accelerate the rate of global change. This scenario results in greater convergence of the business and development worlds, in line with growing corporate and investor interest that aims to achieve social value combined with financial returns. As stated by the IDB, ‘companies are realizing that staying competitive and growing now and in the future means looking beyond short-term gains and toward addressing salient economic, social, and environmental challenges that affect both their business and society.’⁶

In the light of those shifting parameters, MDBs are committed to strengthening those working relationships, particularly through providing financial and non-financial support at the regional, national and subnational level, and have joined forces to harmonise methodologies to catalyse other financing (private sector and domestic revenues), always aiming to maximise resources such that the SDGs become a reality.

The value proposition for MDBs consists in their ability to be trusted partners who can provide the best services at the lowest cost, using a strong presence in the countries in which they act, which allows them to tailor solutions to their clients’ (usually national shareholders) needs on a case-by-case basis.⁷ MDBs’ project finance operations consist of a leverage structure on which the investor can deliver profit and generate measurable, positive, social or environmental impact, combined with a financial return. MDBs’ financial structure and financing capabilities enable them to leverage their capital to provide finance in many forms (‘blended’ finance, loans, guarantees, equity investment) and purposes.

MDBs use the money contributed or ‘subscribed’ by the relevant member countries to support the assistance programmes. They fund their operating costs from money earned on non-concessional loans to borrower countries. To offer non-concessional loans, MDBs borrow money from international capital markets (in many cases backed by the guarantees of their member governments, which are callable capital) and then re-lend the money to developing countries. This backing is provided through share ownership to which countries subscribe because of their membership in each bank. Only a small portion (typically less than 5–10 per cent) of the value of these capital shares is actually paid to the MDBs.⁸ By leveraging these amounts, the MDBs’ banking model attracts substantial resources from capital markets at interest rates reflecting their strong financial structure and high ratings.⁹

5 The African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the Inter-American Development Bank, the International Monetary Fund, and the World Bank (2015). From Billions to Trillions: Transforming Development Finance Post-2015 Financing for Development: Multilateral Development Finance. Development Committee Discussion Note 2015-0002.

6 Inter-American Development Bank – 2018 Development Effectiveness Overview (DEO).

7 Bhattacharya A, Kharas H, Plant M, Prizzon A (2018) The New Global Agenda and the Future of the Multilateral Development Bank System. *International Organisations Research Journal*, vol. 13, no 2, pp. 101–12.

8 Multilateral Development Banks: Overview and Issues for Congress, Rebecca M Nelson, dated 6 July 2018.

9 From Billions to Trillions: Transforming Development Finance Post-2015 Financing for Development: Multilateral Development Finance. Development Committee Discussion Note 2015-0002.

With regard to engagement with their clients, MDBs help to design and implement demand-based, country-driven, cross-sectoral technical and financial development solutions, and provide policy advice and technical assistance on tax matters related to the financed projects. In addition, MDBs support investment in systems, institutions and marketing. With respect to climate change matters, for instance, MDBs can assist through collective work with its global clients on actions aiming to generate multiple local health, agricultural, employment and resilience benefits.

It is also worth noting the commitment of the relevant participant countries in implementing the 2030 Sustainable Development Agenda and other global priorities. As per the request by the Group of Seven (G-7) countries dated 3 May 2017, there was a call for MDBs to collaborate in more concrete joint efforts and actions aiming at the development of a common framework based on maximum economic efficiency and effectiveness of the investments, together with the private sector.¹⁰ Given the ambitious targets set out by the SDGs and the considerable financial resources needed to meet such commitments, MDBs have a role to play in engaging in relevant projects to mitigate risks and support the required financing through public or private partners (or both).

II LOAN PROGRAMMES

i Instruments, guarantees and eligibility requirements

The implementation of project financing solutions by MDBs is established in each contractual instrument involving the relevant players, which may require certain types of guarantees, risk insurance, blended finance and other risk-mitigation measures to be structured and customised on a case-by-case basis to solve specific issues.

Beyond the traditional undertakings provided in the project finance instruments commonly used in the private sector (such as loans, equity investment and guarantees), the 2015 ‘Billions to Trillions’ Discussion Note outlined the following categories of financing solutions used by MDBs, each one comprising specific approaches and tools for customisation purposes to achieve a project goal:

*(1) adding, pooling and enabling instruments to generate new flows, or more results for the same money; (2) debt-based/right-timing instruments that match flows to when cash is needed; (3) risk management instruments to manage or reduce risk for investors (i.e., correcting market failures, reducing regulatory risk) or consumers (e.g., weather insurance for farmers, local currency matching for micro, small and medium-sized enterprises (MSMEs)); and (4) results-based financing where payments are made specifically for desired results.*¹¹

Public-private partnerships (PPP) are supported by several MDBs by means of assistance to the member countries to build capacity and knowledge to structure and implement quality PPPs, including complex emerging-market infrastructure projects. For this purpose, the World Bank has a ‘PPP Certification Program’ to enhance performance, build capacity and ensure global good practice. The Inter-American Development Bank in turn provided

10 G-7 call for more concrete actions to develop a common approach for value for money. Available at www.g8.utoronto.ca/finance/170513-communique.html.

11 From Billions to Trillions: Transforming Development Finance Post-2015 Financing for Development: Multilateral Development Finance. Development Committee Discussion Note 2015-0002.

advisory support to Argentina to assist in the structuring of contracts and bidding documents for the first PPP road project under Argentina's new PPP law. The advisory support was successfully provided and as a result the Argentine government requested additional support from the bank to structure transmission line projects. The bank also provides similar technical assistance for other member countries, such as Bahamas, Bolivia, Brazil, Dominican Republic and Guatemala, in response to each one's regional demands.¹²

With respect to eligibility criteria, most of the regional and sub-regional MDBs require existing membership of a specific organisation or region for countries to join as members or borrowers. Although all MDBs have a common mandate to support private development finance to implement the proposed SDGs, each one has its own internal operations and strategic goals in serving their relevant region and improving its own internal operations. In the context of project finance, MDBs consider that an assessment of the potential impact of changes in each regional context is fundamental for the success of efforts to develop a relevant project. Depending on the result of that assessment, the legal and financing structure of a project will be adapted accordingly, to accommodate the relevant region's particularities and development stage.

The World Bank group was founded in 1944 and it is currently the world's largest source of funding and knowledge for developing countries. It is composed of five institutions: the International Bank for Reconstruction and Development, the International Development Association, the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency, and the International Centre for the Settlement of Investment Disputes. In 2018, the commitments of the World Bank Group amounted to around US\$67 billion and the disbursements around US\$46 billion.¹³

The World Bank was created initially to focus on providing financing for large infrastructure projects. Over time, the bank has broadened its scope to include social projects and policy-based loans. Certain criteria are applied to determine if a relevant project or policy is eligible for support. The project must implement the bank's policies, and be capable of meeting the bank's environmental, social and anti-corruption guidelines in the member country. There must be a clear and defined development impact and the necessity to mobilise private investment or mitigate government payment risk.

The World Bank requires the execution of contractual agreements typically used in project finance transactions reflecting the direct relationship between the bank and the relevant member country. The parties to those agreements are the World Bank (as guarantor), the relevant government (as obligor) and the private investors (as beneficiaries).¹⁴ The World Bank also provides a 'guarantee program' to enhance the credit quality of sovereign and sub-sovereign obligors to reduce costs and improve financing terms for projects and governments, and ensure the long-term sustainability of projects.¹⁵

Similarly, the Asian Development Bank was also initially established in the early 1960s with the purpose of providing financing for large infrastructure projects rather than social projects or direct poverty mitigation. Nowadays, the main infrastructure projects developed by the bank are related to transport, water, energy, urban development, and information and communications technology. Its mandate consists of promoting economic growth and

12 Inter-American Development Bank – 2018 Development Effectiveness Overview (DEO) Report.

13 The World Bank Annual Report 2018.

14 www.worldbank.org/en/programs/guarantees-program#4.

15 www.worldbank.org/en/programs/guarantees-program#2.

cooperation in Asia and the Far East, and contributing to the acceleration of the process of economic development of the developing member countries. The bank's support is made through loans and grants, as well as by means of technical assistance to its member countries, to the private sector, and through PPP structures. As a demonstration of the bank's focus on infrastructure, its projected transactions will have increased by 50 per cent, from US\$14 billion in 2014 to more than US\$20 billion in 2020, of which 70 per cent is addressed to infrastructure projects.¹⁶

The IDB was created in 1959 to support Latin American and Caribbean economic development, social development and regional integration. It is the largest source of development financing for the region.¹⁷

In addition to the IDB, the Development Bank of Latin America (CAF) also plays an important role in Latin America and the Caribbean. The main difference among these MDBs is that CAF has a strong focus on infrastructure and projects that promote connectivity and integration within the region (such as transport and energy), with almost 70 per cent of its financing portfolio directed to those types of projects. Geographically, the bank's operations are mainly focused on Venezuela, Ecuador, Argentina, Peru and Colombia. Most of the IDB's loans, on the other hand, aim to accelerate the process of economic and social development in member countries: Brazil and Mexico are the two largest beneficiaries of such loans.¹⁸

The European Bank for Reconstruction and Development was founded in 1991, at a time of transition to a free market economy in the former communist countries of central and eastern Europe and the former Soviet Union. The bank differs from other MDBs given its historical provenance and its political mandate to focus on supporting democracy-building assistance targeting the private sector.¹⁹

The Asian Infrastructure Investment Bank started its operations recently in 2016, targeting social and economic development in Asia through investments in sustainable infrastructure, such as energy generation, water supply, sanitation and environmental matters. Its membership includes several advanced European and Asian economies, consisting of regional members (e.g., Australia, Cambodia, Fiji, India and Malaysia) and non-regional, prospective members (e.g., Argentina, Brazil, Canada, Spain and the United Kingdom). It is worth noting that the United States and Japan are not members of the bank.

The Eurasian Development Bank was created in 2006, by the Presidents of the Russian Federation and the Republic of Kazakhstan. The bank is primarily focused on projects related to energy, transport and infrastructure in the six member states (Russia, Kazakhstan, Armenia, Tajikistan, Belarus and Kyrgyzstan). According the bank's website, as at January 2019, the bank's investment portfolio comprises US\$3.442 billion, involving 85 projects.²⁰

The African Development Group was founded in 1964 and its current shareholders are 54 African regional countries and 26 non-regional member countries. Its operational priorities relate to infrastructure development, regional economic integration, support for private

16 Asian Development Bank's website. Available at: <https://www.adb.org/about/infrastructure>.

17 <https://www.iadb.org/en/about-us/overview>.

18 Overseas Development Institute (ODI) – A Guide to Multilateral Development Banks 2018 edition. Available at: <https://www.odi.org/sites/odi.org.uk/files/resource-documents/12274.pdf>.

19 Multilateral Development Banks: Overview and Issues for Congress. CRS report prepared for the Members and Committees of Congress. Rebecca M Nelson 6 July 2018.

20 Eurasian Development Bank website. Available at: <https://eabr.org/en/projects/eabr/>.

economic development, governance and institutional accountability, and improvement of skills and technology. As at 2017, the bank's approved transactions amounted to US\$6.2 billion.²¹

As a final note on the various MDBs, it is worth mentioning the New Development Bank (NDB). The NDB was formed in 2015 by the BRICS countries (Brazil, Russia, India, China and South Africa), which represent 26 per cent of the planet's land mass and is home to 46 per cent of the world's population.²² In the period 2016 to 2017, NDB's board of directors approved loans involving financial assistance of over US\$3.4 billion for projects in the areas of green and renewable energy, transportation, sanitation, irrigation and other areas.²³ The bank is committed to continuing to mobilise development resources in BRICS projects, complementing the efforts of other MDBs to supplement and promote global development by attracting resources for the infrastructure sector.

ii Projects covered by MDBs

According to the working paper 'Mobilization of private finance by multilateral development banks and development finance institutions 2017', produced by the MDBs²⁴ led by the IFC,²⁵ in 2017 more than US\$160 billion in private investment was mobilised by MDBs and development finance institutions. It was also assessed that in 2017: total private investment stimulated by MDBs in low- and middle-income countries amounted to US\$59 billion, of which US\$19 billion was private, direct mobilisation; US\$26.7 billion, or 45 per cent of the total private investment mobilised in low and middle-income countries was directed into infrastructure projects; and the IFC accounted for more than 30 per cent of all private investment mobilisation in low and middle-income countries. One-fourth of that was private direct mobilisation.

In this context, it is worth highlighting the following project finance transactions in the infrastructure sector that demonstrate the challenges related to catalysing private sector investment combined with public resources and its effective development impacts.

The IDB has invested in a renewable energy project named Santa Vitoria do Palmar, located in the south of Brazil, which is considered a priority for the Brazilian government regarding electricity supply and the diversification of Brazil's energy matrix. The project includes the construction of 12 wind farms and ancillary facilities that would produce 207 megawatts (MW) of electricity. The estimated total cost of the project is 1.3 billion reais (around US\$325 million). To support financing the project, 105 million reais of debentures were issued in the local market and IDB Invest issued a total credit guarantee of 125 million reais (approximately US\$33 million) with a 12-year tenor for the debentures to improve their risk profile and pricing. The financing plan was completed with the participation of two local development institutions (Banco Nacional do Desenvolvimento and Banco Regional

21 African Development Group website. Available at: <https://www.afdb.org/en/about-us/corporate-information/>.

22 brics.itamaraty.gov.br/about-brics/economic-data.

23 <https://www.ndb.int/about-us/essence/history/>.

24 African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, European Investment Bank, The Inter-American Development Bank and World Bank.

25 Mobilization of Private Finance by Multilateral Development Banks and Development Finance Institutions, dated June 2018. Available at https://www.ifc.org/wps/wcm/connect/publications_ext_content/ifc_external_publication_site/publications_listing_page/2018_mdb-mobilization-report.

de Desenvolvimento do Extremo Sul, which provided a 680 million reais (around US\$180 million) long-term loan, as well as equity contributions. The project had a security package in line with what is customary for project finance transactions.²⁶ According to IDB Invest, this is the first time that a full-wrap product of this type was structured in the Brazilian market and it is also IDB Invest's first guarantee issued in reais for a renewable energy project and its first guarantee of an infrastructure debenture in the local capital markets. By providing an international AAA guarantee, IDB Invest seeks to foster growth in Brazilian capital markets to attract new sources of liquidity, such as domestic multi-family offices. The bond settlement took place on 31 July 2018 and raised up to five times more than the amount required, demonstrating the success of this strategy to mobilise private capital.²⁷

Another example of a project supported by a blended finance structure is the development, construction and operation of a 1,070MW Hydropower Project named Nam Theun 2 (NT2), located on the Nam Theun River in Laos, one of Asia's poorest countries. The project cost US\$1.3 billion and its main objective is to support the government of Laos' poverty alleviation efforts by generating income of about US\$2 billion over 20 years. NT2 is expected to provide 1,000MW of power for export to Thailand and an additional 75MW for domestic consumption. The Asian Development Bank, European Investment Bank and World Bank are among the MDBs involved in financing the project, together with other bilateral funding agencies and commercial banks.²⁸

As a final example, a project finance arrangement was structured in 2010 to enhance access to electricity in northern Tanzania, achieve better power distribution across regions, improve the reliability of power supply and improve integration in regional power pools. The project included equity, loans and guarantees from 26 financial institutions, including MDBs (the World Bank Group, the Asian Development Bank, the European Investment Bank and the Nordic Investment Bank), bilateral funding agencies and several commercial banks. The project involved the construction of a 667km transmission line between Iringa and Shinyanga, operated at 220 kilovolts, with a total cost of up to approximately US\$468 million. According to the World Bank's project report, the expected closing date of the project was 31 December 2016. However, the project experienced a delay of more than 30 months, because of a lack of appropriate mechanisms for coordinating procurement decisions by donors and the limited procurement capacity of the promoter or financial intermediary, Tanzania Electric Supply Company, at the time. According to the World Bank's assessment, the outcomes of the project were satisfactory, the risk to development outcome was low, the bank performance was moderately satisfactory, and the borrower performance was also moderately satisfactory. The lesson learned is that, for future multi-donor projects, additional legal arrangements could be introduced, suggesting conditions for joint procurement, advanced procurement and capacity-building activities addressing the inherent complexities of harmonising different processing requirements of development partners.²⁹

26 <https://www.idbinvest.org/en/projects/atlantic-santa-vitoria-do-palmar>.

27 <https://www.idbinvest.org/en/news-media/idb-invest-provides-r125-million-total-credit-guarantee-santa-vitoria-do-palmar-wind-farm>.

28 <https://www.worldbank.org/en/news/press-release/2018/01/30/statement-on-the-closure-of-the-world-bank-funded-nam-theun-2-social-and-environment-project>.

29 Tanzania Backbone Transmission Investment Project – Projects & Operations Overview. Available at <http://projects.worldbank.org/P111598/tanzania-backbone-transmission-investment-project?lang=en&tab=overview>.

III CONCLUSION

The ambitious vision of achieving ‘billions to trillions’ and the achievement of the SDGs by 2030 will require global coordination and initiatives aimed at increasing the private and public resources devoted to national policies and programmes that focus on the world’s biggest problems in their highly varied national contexts. Despite the fundamental role of MDBs in this process, eight of the major MDBs (excluding the European Investment Bank) invested only US\$35 to 40 billion a year in infrastructure, and public expenditure on infrastructure has also significantly decreased.³⁰ In addition, according to the European Investment Bank report 2018/2019, the number of investments through PPPs³¹ fell to €9 billion in 2017 from €30 billion in 2005, a trend that can be explained by a very cautious attitude to PPPs replacing a previous enthusiasm, rather than changes in regulation or the cost of funding.³²

This can be understood as reflecting the concerns of governments regarding the risks and uncertainties of business success in these projects, with success defined as generating a measurable, positive, social and environmental impact with an effective financial return. In this sense, reassessing the pros and cons of the existing financial structures, and their relevant instruments and alternatives, to increase credit exposure is a way to ensure the effectiveness of the MDBs. For this purpose, governments can take a stronger role in infrastructure finance arrangements that aim to attract more proceeds from other sources by improving the legal instruments and protections for private investors. In this sense, the greater and more strategic use of MDBs will be fundamental to mobilise much more private finance, including through blended finance.

Although the investment circumstances vary from country to country considering the relevant context, development stage and specific country needs, it is important to have an attractive environment to investment, which includes transparency, a predictable legal, regulatory and investment framework, as well as structures that support innovation.

Innovations in finance include, for instance, increasing the issuance of ‘green bonds’, which are conventional bonds, issued by corporations, commercial banks, MDBs and other participants, the proceeds of which are earmarked for projects with climate or other environmental benefits. The use of green bonds has been encouraged by the MDBs with the purpose of attracting additional resources. In 2018 and 2019, eight more National Development Banks in Argentina, Brazil, Colombia, Ecuador, Mexico and Uruguay will receive support to issue green and sustainable bonds. This strategy will also mobilise additional resources by combining IDB technical support with anchor investments from bilateral banks and other MDBs, including the European Investment Bank.³³ Green bond issuances amounted to US\$167.3 billion in 2018 and the demand for green bonds continues to grow exponentially.³⁴

30 Business and Sustainable Development Commission 2017. *Better Business Better World: The Report of the Business & Sustainable Development Commission*. London. Available at report.businesscommission.org/report.

31 Public-Private Partnerships are an important example of where an effective and supportive business enabling environment is fundamental to success. World Bank Group Support to Public-Private Partnerships: Lessons from Experience in Client Countries, WBG Independent Evaluation Group, 2014.

32 Investment Report 2018/2019: Retooling Europe’s economy. Available at www.eib.org/investment-report.

33 Inter-American Development Bank – 2018 Development Effectiveness Overview (DEO).

34 <https://www.climatebonds.net/resources/reports/2018-green-bond-market-highlights>.

In addition, the use of blockchain technology or similar systems is creating new standards of keeping transaction records securely and across multiple locations, given that all users 'hold' the ledger in a distributed fashion, transforming the role of 'trusted' third parties. Blockchain technology is being used for applications as diverse as land ownership registries, individual identity records and custody of assets.

Lastly, the MDB's support for the harmonisation of the standards, involving the MDBs' agreement on a shared definition of private capital mobilisation, was an important milestone to facilitate additional long-term financing that can support countries in reaching the SDGs. At the request of the G20, the IFC has launched globally an MDB Toolbox to support private sector initiatives.³⁵

All these efforts help not only promote SDGs but have the added benefit of improving local market conditions, thereby enabling project finance structures to be more widely adopted worldwide. In that way, they help improve investor confidence and the market fundamentals required to make project finance structures viable in developing countries.

35 See Global Toolbox to Advance Private Sector Investment. Available at https://www.ifc.org/wps/wcm/connect/publications_ext_content/ifc_external_publication_site/publications/MDBs-Global-Toolbox.

EXPORT CREDIT AGENCIES AND INSURERS

*Barry N Machlin*¹

I EXPORT CREDIT AGENCIES – GENERAL

Export credit agencies (ECAs) are national government-owned or affiliated entities that support exports of goods and services from their own countries by providing financing to foreign purchasers of those goods and services. The fundamental purpose of ECAs is to increase the volume of exports from domestic producers of goods and services by opening up overseas markets for such products through the provision of financing and other financial risk-reducing products. ECA-supported goods and services range from large capital goods, such as aircraft, satellites or locomotives, to finished industrial products, such as solar panels, wind turbines, pumps and engines, to ‘soft’ exports, such as legal, engineering, technical and other services. In a nutshell, ECAs support the expansion of foreign trade by their national exporters and service providers. In doing so, of course, they also support domestic employment.

ECAs have a long history that is intertwined with the expansion of economies and government policies to promote national exports. The first official ECA, the English Credit Guarantee Department, was established in the United Kingdom in 1919. The predecessor to the present German ECA was established in 1917 and US Ex-Im Bank was established in 1934. Many ECAs were established in the post-war period, such as in Austria in 1946 and Japan in 1951, and others in the period from 1970 to 2000, including Iran in 1973, Korea in 1976, India in 1983, Egypt in 1992 and China in 1994. More recently, new or smaller countries have established their ECAs, such as Serbia and Sudan in 2005, Estonia in 2009 and Armenia in 2013.

Today, there are almost 80 countries that have established ECAs or some variation of national export support agencies.

II ECA RISK MITIGATION

The principal benefit ECAs generally provide is the mitigation of risk associated with international trade transactions. Cross-border trade in goods and services has always included various risks imposed on buyers and sellers, such as credit risks related to payment for goods, and political risks related to transit and delivery of goods across borders, often at great distances. Ancient Roman traders faced the same fundamental question as modern-day Asian traders: when does the risk associated with a given transaction outweigh its desirability? Further, the entities to whom exporters and traders might turn to assist them – banks and

¹ Barry N Machlin is a partner at Mayer Brown LLP.

insurers – also might find the associated risks of a given transaction too high. In such a high-risk environment, trade and exports suffer as transactions are deferred or avoided altogether owing to risk concerns.²

ECAs mitigate political and payment risk and thus enhance the ability of market participants to transact – whether they are sellers, buyers or financiers. ECA programmes provide direct finance or guarantees of bank finance, actual political risk insurance or an implicit political risk umbrella owing to their presence in the transaction.

As project finance structures are fundamentally designed around the principles of risk identification, allocation and mitigation, ECAs play a key role in the risk-reduction goals of the participants.

III PRODUCTS AND SERVICES³

Although there are variations in the products offered by ECAs, they typically offer direct loans, loan guarantees and export credit insurance.⁴

In addition, ECA products can be offered as either a supplier's credit or buyer's credit. In a supplier's credit, the ECA loan or guarantee is made to or benefits the domestic exporter (the supplier of the goods or services) and the supplier is then able to include financing terms to the foreign buyer, assisting their purchase of the supplier's goods or services. In a buyer's credit, the ECA loan or guarantee is made to or benefits the foreign buyer, allowing the buyer to finance its purchase of the domestic exporter's goods or services.

Typical financing periods for ECA products are short-term (less than two years), medium (two to five years) and long-term (over five and usually 12 to 15 years).

IV TYPICAL STRUCTURES

ECA participation in major project financing transactions generally use buyer's credit structures and are on a long-term basis (10 to 15 years). In this way, the project company or borrower established for the project financing transaction can borrow the ECA loan (or borrow from banks guaranteed by the ECA), and can pair the ECA-supported financing with other project debt borrowed by the project company, thereby assembling a complete financing package for the project with long repayment terms, enhancing project and sponsor return. The most commonly used ECA structures in project financing are discussed below.

i ECA direct loan structure

In this structure, the ECA makes a direct loan to the foreign project company to support the purchase by the project company of the exports supplied under the goods and services supply agreement between the project company and the domestic exporters.

2 From *The Changing Role of Export Credit Agencies*, Malcom Stephens, International Monetary Fund, 1999.

3 This discussion and those that follow regarding coverage and terms is drawn from the programmes of a number of leading ECAs, including Bpifrance Assurance Export, Euler Hermes of Germany, JBIC of Japan, Korea Eximbank, SACE of Italy, UK Export Finance and US Ex-Im Bank.

4 In this discussion we will focus on the loan and guarantee programmes of the ECAs, as export credit insurance is not a major component of ECA participation in project finance transactions.

ii ECA guaranteed loan structure

This structure is very similar to the previous one, except that the ECA provides a guarantee of loans made by a bank or banks to the project company for its purchase of the exports supplied by the domestic exporters.

V COVERAGE ISSUES

i ECA country content

Given that ECAs have the purpose of supporting their own national exports, generally there are domestic content requirements that must be satisfied for an ECA to provide a loan or guarantee. In project finance, usually the borrower or project company works with the EPC contractors and other suppliers to ensure that domestic content rules are followed. Note that it is often the case that there will be products available from a variety of sources; for example, a Moroccan project company using a German contractor may obtain support from the ECAs of the US, Germany, Italy and Korea if the German contractor sources equipment from manufacturers in each country.

ii Local cost

Project financing always results in certain costs being incurred in the host country. For example, site preparation, concrete and steel installation, and other such activities will require local labour, equipment and supplies. Such project-related costs incurred in the project borrower's country are referred to as 'local costs' and ECAs will often provide credit support for a fixed percentage of the local costs in addition to the national export costs they are financing. This provides project borrowers with an ability to obtain credit from ECAs for a larger portion of the overall project financing needs and assists project economics by wrapping more of the total project debt into the ECA facilities.

iii Coverage percentages and types

'Cover' is the credit exposure percentage of the eligible goods and services that an ECA agrees to provide through its loan or guarantee to the project company borrower. Such percentages range from 80 to 100 per cent depending upon the ECA and the type of ECA programme being employed in the specific transaction. In addition, ECA programmes can offer comprehensive cover (meaning both commercial and political risks are covered), commercial cover (which excludes political risks) or political risk cover (which excludes commercial risks). The optimal goal for most projects is to maximise the comprehensive cover percentage from the ECAs.

VI PRICING

ECA pricing generally has multiple components:

- a* Interest rates – these will vary according to whether the ECA credit is a guarantee of commercial bank debt or a direct loan by the ECA itself and whether the loan is on a fixed or floating-rate basis.
- b* Commitment fees – expressed as a percentage of the total loan or credit exposure charged to compensate the ECA for reserving or committing its funds or credit exposure to the relevant transaction for the requested tenor of the loan or support.

- c* Exposure fees – expressed as a percentage assessed on each disbursement of the loan or credit exposure event, which compensates the ECA for the assessed risk associated with the transaction. Exposure fee calculation components will generally include consideration of the host country of the borrower, the nature of the transaction, the tenor of the loan or guarantee and other risk features of the proposed transaction.

In addition, the OECD (discussed below) has established minimum premium benchmarks that act to constrain overall fee rates charged by ECAs, by establishing a floor for such fee rates that can only be derogated from in specified circumstances.

VII OTHER IMPORTANT POLICIES

ECAs typically require adherence to various policies by the project, the contractors and suppliers, and the project company and its shareholders. This requirement reflects the fact that ECAs are government entities and are also subject to significant attention by non-governmental organisations that monitor their compliance with various codes and standards related to aspects of foreign direct investment in emerging markets. These policies can have significant impact on project design, construction and operation, as well as on the business practices of the project company. Policies can vary from ECA to ECA, and therefore project companies may often need to comply with a variety of such policies covering for example:

- a* anti-bribery, anti-corruption and anti-money laundering;
- b* environmental, social and corporate responsibility;
- c* gender equality and empowerment;
- d* anti-terrorism;
- e* UN and international economic and political sanctions;
- f* high carbon-intensity projects; and
- g* military, security and dual-use equipment.

VIII GOVERNING AND COORDINATING INTERNATIONAL ORGANISATIONS

i The OECD

In the same way that producers of goods compete against each other – Airbus versus Boeing or Caterpillar versus Komatsu – ECAs compete against each other to provide favourable credit terms to allow their respective national exporters to secure sales and expand their foreign trade. Since the ECA-supported exports in most project financing arrangements are quite sizeable, the impact of the ECA fee and financing costs can also have a material impact on project economics, and ultimately on sponsor return. The obvious potential downward spiral of increasingly competitive ECA support packages would result in unfair competitive advantage benefitting the national exporters whose ECA was willing to offer the most concessional terms, resulting in a negative impact on buyer (i.e., project company or sponsor) choices. In this way, there is potential scope for countries to use their ECAs to unfairly subsidise their own exports through ECA credit terms (such as offering longer debt tenors, lower interest rates or other concessional terms). The resulting effects would be to skew the market towards all-in price competition (i.e., goods and financing costs) and away from comparative values of the actual goods produced by differing national producers.

To address these concerns and, more generally, to introduce transparency into the ECA market, various countries, including the vast majority of the developed economies whose ECAs have a very large combined market share in ECA-supported project financing, are participants in two international organisations that focus on ECA-related issues: the Organisation for Economic Cooperation and Development (the OECD) and the Berne Union.

The OECD was established in Paris in 1961 by 18 European countries, the US and Canada. Today it has a membership of 36 countries, including a number of leading emerging market countries, such as Mexico and Turkey. The stated mission of the OECD is to provide a forum for governments to develop common economic policies on various issues, to establish international standards on various goods, and to be a clearinghouse for reliable data on global and members' trade and investment volumes, GNP, GDP, productivity and other economic metrics.

Since 1978, the OECD has administered the Arrangement on Officially Supported Export Credits,⁵ which seeks to level the playing field and eliminate (or severely limit) financial subsidies and potential trade distortions. The Arrangement thus sets forth the most generous export credit terms and conditions that may be supported by its participants.⁶ It is a 'gentlemen's agreement' among its participants who represent most OECD member governments⁷ and, thus, it is voluntary and not legally enforceable by its members. Ultimately, the purpose of the Arrangement is to maintain a global trade system where exporters compete on the basis of the price and quality of their products rather than the financial terms provided by their ECA, thus eliminating trade distortions and subsidies.

Supplementing the Arrangement are six Sector Understandings that cover export credits in the area of ships, nuclear power plants, civil aircraft, renewable energy, climate change mitigation and adaptation, water projects, rail infrastructure, and coal-fired electricity generation projects. These sectors have special technical, financial and national policy characteristics that warrant different treatment from other exports of goods and services addressed by the arrangement.

In general, the Arrangement and the Sector Understandings are considered by the ECA itself in connection with its consideration of a requested loan or guarantee for a particular project and the establishment of the various financial terms that will apply to its offered financing to the project company or sponsor.

ii The Berne Union

Unlike the OECD, which was formed by national governments and whose members are all states, the Berne Union is an international not-for-profit trade association, representing the global export credit and investment insurance industry.⁸ The Berne Union⁹ has more than

5 The Arrangement can be found at: <http://www.oecd.org/tad/xcred/theexportcreditsarrangementtext.htm>.

6 The Arrangement includes procedures for prior notification, consultation, information exchange and review for export credit offers that are exceptions to or derogations of the rules as well as tied aid offers.

7 The Arrangement participants are: Australia, Canada, the European Union, Japan, Korea (Republic of), New Zealand, Norway, Switzerland and the United States.

8 The formal name of the Berne Union is the International Union of Credit and Investment Insurers. Its website can be found at: <http://www.berneunion.org/>.

9 A full list of members of the Berne Union can be found at: <https://www.berneunion.org/Members>.

80 members that include ECAs, private credit and political risk insurers, and multilateral institutions that provide differing types of financial and insurance support of cross-border trade.

Berne Union members have significant impact – according to their 2017 statistics, members supported 14 per cent of global cross-border trade under the equivalent of US\$2.35 trillion of trade financing and insurance support.¹⁰ Of this total, US\$179 billion consisted of medium-to-long-term credits from ECAs.

Although the Berne Union is a private trade association and not a regulatory or government organisation, it provides a forum for ECAs and trade insurers to discuss policies and issues that affect their various products. As a result, the Berne Union has an important role in the shaping of ECA policies that are implemented in the support of project finance transactions.

IX POLITICAL RISK INSURERS

i General

Project and infrastructure development and financing transactions face a multitude of risks. Some of these risks can be addressed by due diligence, contract terms or credit support. However, particularly in emerging markets, risks related to political actors or occurrences can be very difficult to mitigate through those conventional approaches. In these cases, both equity investors and debt providers can use political risk guarantees or political risk insurance to wholly or partially mitigate such risks and cover losses arising from those events. In the words of the World Bank's political risk agency, the Multilateral Investment Guarantee Agency (MIGA): 'Political risk insurance (PRI) is a tool for businesses to mitigate and manage risks arising from the adverse actions – or inactions – of governments.'¹¹

Political risk mitigation products are offered by many entities. In general, the market consists of public agencies and private providers. The public providers include multilateral agencies (such as MIGA), many ECAs, and bilateral agencies or development finance institutions (DFIs). These DFIs, such as the US Overseas Private Investment Corporation (OPIC), are government agencies whose purpose is to promote developmental objectives in emerging markets.

On the private side of the market, major political risk providers include a variety of insurance companies and associations, including AIG, AXA XL, Chubb, Lloyd's of London, Sovereign Risk Insurance Ltd and Zurich Insurance Group.

Although there are many public and private entities providing PRI, in emerging market project finance transactions the most significant providers are MIGA, the ECAs and the DFIs.

ii PRI Form

Typically, ECA political risk products are called political risk guarantees, whereas the products offered by MIGA, OPIC, other DFIs and the private market are called political

10 These and other Berne Union statistics come from The Bulletin, Berne Union Spring Meeting Newsletter, 19 March 2018 (available at <http://cdn.berneunion.org/assets/Images/6345be17-145a-4695-aaa1-44fa4980b71c.pdf>).

11 <https://www.miga.org/political-risk-insurance>.

risk insurance. While there are legal distinctions between these two forms of coverage and the associated mechanics for claim and payment, these distinctions are not relevant for this chapter. As a result, the term 'PRI' will be used here to refer to all forms of this coverage, whether guarantee or insurance.

iii PRI risk coverage¹²

PRI cover can be obtained to address the following types of risks that are of common concern in project finance transactions:

- a* Expropriation: losses arising from actions or inactions of the host government that eliminate, deprive or reduce ownership or control (or both) over project assets or the project investment, including physical assets and shares in the project company.
- b* Currency inconvertibility and transfer restrictions: losses arising from the inability or restriction of conversion of local (host country) currency into foreign currency or on the transfer of foreign exchange outside the host country.
- c* War and civil disturbance: losses arising from destruction or damage to project assets caused by politically motivated acts of war or civil disturbance in the host country.
- d* Breach of contract: losses arising from a host country's breach or repudiation of a contract with the project.
- e* Award frustration: losses arising from a host government's non-payment of a binding arbitral or judicial decision.

iv Typical structures

PRI can be obtained by either the equity investors (sponsors) of a project or by the lenders. In general, equity coverage will focus on risks that deprive the investors of their ownership interests, value of the project assets or ability to repatriate dividends or profits (or both). Lenders, who are not project owners and are fundamentally interested in recovery of their debt (principal and interest), will focus on coverage that provides timely repayment of their loans and financial exposure.

In addition, a significant volume of PRI has been taken out to support capital markets issuances (bonds), especially in circumstances where the rating of the bonds would be limited by country risk concerns. In these circumstances, PRI can be used to help bond issuers to 'pierce the sovereign ceiling' and achieve an investment grade rating not otherwise achievable owing to political risk.

v Coverage issues

ECAs that provide PRI generally have coverage requirements and limitations that track those found in their guarantee programmes discussed above. PRI providers that provide insurance products typically have limitations of the following types:

- a* criteria regarding the eligibility of the investment (specific asset or equity interest) to be insured;
- b* tenor of policy – most often from one to 20 years;

12 This discussion and those that follow regarding coverage and terms is drawn from the programmes of a number of leading official PRI providers, including MIGA, OPIC, NEXI of Japan and KSURE of Korea.

- c* percentage of eligible investment that the policy will cover – generally, the policyholder is required to risk-share with the PRI provider by retaining some percentage of the risk of loss (for example, OPIC can insure up to 90 per cent of an eligible investment, with the investor retaining a 10 per cent risk share); and
- d* specific claims procedures requiring submission of documentation in specified time frames, exclusions to cover and, as a condition of payment, transfer or subrogation (or both) to the insurer of the insured's covered investment.

vi Pricing

PRI is priced on a premium-basis, with premium calculations dependent on factors specific to the relevant investment, including country, sector, transaction type, nature of covered risks and coverage tenor.

vii Governing and coordinating international organisations

ECAs that provide PRI are subject to the OECD Arrangement's terms, discussed above. Moreover, also as discussed above, the Berne Union plays a prominent role in the dialogue among public and private PRI providers, and has more than 80 members actively supporting international trade and investment transactions, many of which are PRI providers. According to its recent statistics, in the first half of 2018, Berne Union members paid US\$2.65B of total claims, with 53 per cent of such claims relating to medium or long-term export transactions for capital goods and infrastructure.¹³

13 See Berne Union Credit and Investment Insurers continue to pay high claims: US\$2.65 bn in the first half of 2018, Press Release 17/10/2018 Paris, available at <http://cdn.berneunion.org/assets/Images/Paris%20AGM%20Press%20Release%20Final.pdf>.

CORE PROJECT AGREEMENTS

*Richard M Filosa*¹

I INTRODUCTION

To fully appreciate project agreements, it is important to understand their significant role in a project finance transaction, which is essentially a non-recourse financing arrangement, meaning that the lenders are not lending primarily upon the creditworthiness of any particular sponsor of a project. Why would lenders provide hundreds of millions of dollars towards a project without recourse to a credit-worthy entity? Because in project finance the nature of the project generates a predictable revenue stream, and it is this revenue stream and the underlying asset generating that revenue stream that is the primary basis of the credit. The construction and operation of an electric power generation facility is the classic example of an asset type that is often the subject of a project finance transaction.

It is against this backdrop that one can see the critical role of the core project agreements in a project finance transaction. The core project agreements are designed to lock in that predictable revenue stream. They must work together to allocate the risks that can affect the value of the revenue stream inherent in the construction and operation of a project to those parties best equipped to take on and mitigate that risk.

However, constructing a project that will generate revenue is only one part of the equation. You cannot assign a value to a project's revenue stream without understanding how consistent that revenue stream will be, and how much it will cost to build, operate and maintain it.

II EPC CONTRACTS

An engineering, procurement and construction contract (EPC contract) does exactly what the name implies. The project owner, typically a special-purpose entity, contracts with a single contractor that will be solely responsible for all of the engineering, equipment and materials procurement and construction of the project. In most cases, these contracts are referred to as 'fully wrapped' obligations, meaning that even though the contractor may subcontract significant portions of the work to others, it remains solely responsible for all of the work, including the work performed by others. This single point of responsibility had been traditionally favoured by lenders and project sponsors. If the completion of a project was delayed or the project was found to be defective, lenders and sponsors had recourse to a

¹ Richard M Filosa is a partner at Morgan, Lewis & Bockius LLP.

single creditworthy entity and the security it provided, avoiding being caught in the middle of a dispute between the contractor and one of its subcontractors concerning the root cause of the underlying issue.

However, this does not come without consequence to the project. To accept the risk of performance for all of its subcontractors, a contractor will often build a risk premium into its pricing. This risk premium will affect the value of the revenue stream of the project. As a result, over the past few years some projects have been project financed with a bifurcated EPC contract. In a bifurcated structure, typically, the major equipment procurement portion of the work is carved out of the EPC contractor's work scope and the project owner directly contracts with the equipment supplier for this portion of the work. The EPC contractor's work scope is then limited to the balance of the project. While this approach can lower the overall project's construction costs and thereby enhance the overall project's revenue stream and value, it does shift some of the construction risk onto the project owner. Lenders and project sponsors in these cases need to be wary of getting caught in a 'finger-pointing' scenario whereby a project is delayed or not performing properly and the EPC contractor and the equipment supplier are blaming each other as the root cause of the issue, leaving the lenders and the project owner stuck in the middle of the dispute.

In addition to traditionally providing the project with a fully wrapped single point of responsibility for the construction of the project, the other most important aspect of an EPC contract is that it provides cost and schedule certainty. Project-financed EPC contracts are most typically fixed-price contracts that include a guaranteed completion date. Harkening back to our project sponsor's desire to create a project with a predictable revenue stream, it is easy to understand the significance of contracting with a reputable contractor who will guarantee the project's completion date at a fixed price.

At its core, an EPC contract is therefore a fairly straightforward contract: the project owner and the contractor agree that the contractor will engineer, procure and construct a 500 megawatt gas-fired combined cycle electric power generation facility for the owner at a fixed contract price of US\$X million dollars and will guarantee completion of the project in Y months. That is a simple agreement, so why are EPC contracts typically hundreds of pages long? The essential simplicity of the EPC contract is complicated by hundreds of 'what-ifs'. What if the work is delayed or the cost increases and it is not the contractor's or one of its subcontractor's fault? What if the owner causes the delay or changes the scope of work? What if there is a *force majeure* event? What if the project does not perform as expected? These concerns and hundreds of others have caused EPC contracts to become lengthy and complex legal documents.

In drafting or reviewing an EPC contract, it is critical to focus on the circumstances that could result in a change in the fixed price, a change in the guaranteed completion date or a shift in any portion of the construction risk back onto the project owner and indirectly the lenders. It is also critical to take note of the project owner's recourse for the contractor's failure and the security for that recourse. With this in mind, let us consider some of the more material provisions of an EPC contract.

i Scope of work

It is important that the EPC contract include a clear, comprehensive and detailed scope of work. While detailed engineering is part of the contractor's EPC scope, the scope of work

exhibit (sometimes called design basis) must accurately detail the specifications of the project. Disputes between project owners and EPC contractors routinely involve questions of whether something was intended to be part of the contractor's scope or not.

ii Change orders

The basic premise of an EPC contract is that the contractor will provide all of the engineering, procurement and construction services necessary to complete the project for a fixed price and with a guaranteed completion date. There are, however, limited circumstances that would entitle the contractor to a change in the price or schedule pursuant to a change order. These change order circumstances should be narrowly and clearly defined, and include a clear process. Standard change order circumstances include unknown and unforeseeable subsurface conditions, unknown pre-existing hazardous substances, *force majeure*, owner-caused delay, and scope changes approved or directed by the owner. Any other circumstances that could result in a price or schedule adjustment should be sceptically viewed by project sponsors and lenders.

iii Guaranteed completion and delay liquidated damages

There are three completion milestones that are typically specified in an EPC contract, with detailed criteria for each and a process to certify achievement. The first hurdle is typically called mechanical completion. Mechanical completion is achieved when a project has been constructed and individual systems have been checked out to the point where the project is ready to begin its performance testing. While mechanical completion is an important step in the completion process, it is really just a prelude to the significantly more material milestone of substantial completion (sometimes also referred to as commercial operation or provisional acceptance). Therefore, it is unusual to have delay liquidated damages associated with the failure to meet mechanical completion by a certain date. Substantial completion on the other hand is a materially more significant hurdle. At substantial completion the project has not only achieved mechanical completion but it has also satisfactorily completed its performance testing. The performance tests are designed to demonstrate that the project can generate the expected output while also achieving certain efficiency requirements, all the while satisfying any environmental requirements. In an electric generation facility project, these tests are normally measuring electrical output and also heat rate at varying conditions. A reliability test is also often performed.

Substantial completion is the most critical milestone in a project-financed construction project. It is at substantial completion that the project shifts from a construction project to an operating asset, commencing commercial operation and generating revenue. It is at substantial completion that risk of loss, and custody and control of the project shifts from the EPC contractor to the project owner. It is a major event in any project financing.

Given the significance of the event, an EPC contract usually includes a specified guaranteed substantial completion date with delay liquidated damages due from the contractor for each day of delay. Delay liquidated damages act as an incentive for the contractor but also a protection for the project sponsors and lenders, replacing the lost revenue and covering debt service and other losses during the delay. Delay liquidated damages are often capped at a percentage of the contract price.

Final completion is the last major construction milestone. After substantial completion, often some small non-material work remains to be completed. These 'punch-list' items are deferred until after substantial completion. When all of the work, including any punch-list

item, has been completed the project will have achieved final completion. It is unusual to have delay liquidated damages associated with the failure to meet final completion by a certain date.

iv Minimum performance levels and performance liquidated damages.

To achieve substantial completion, the contractor must demonstrate that the project has successfully completed its performance testing. What if the test results for output and efficiency are close but not 100 per cent achieved? Typical EPC contracts will specify certain minimum performance levels whereby the contractor can achieve substantial completion notwithstanding that 100 per cent of a certain performance level has not been achieved. If the EPC contractor has achieved substantial completion by satisfying the minimum performance levels but not the full performance levels, the contractor will be granted a cure period, typically in the 180-day plus range, to cure the performance shortfall. If after the cure period the contractor has still failed to meet the full performance criteria, it will have to pay certain performance liquidated damages (sometimes called buy-down liquidated damages). These performance liquidated damages should be assessed to approximate the loss in the revenue stream associated with the shortfall. As with delay liquidated damages, performance liquidated damages are often capped at a percentage of the contract price. There is often also an aggregate cap on delay and performance liquidated damages.

v Payment

Most often the contract price is paid monthly based upon the achievement of certain milestones. Other EPC contracts will have the contract price paid monthly based upon the completion of certain aspects of the work. In any event, the contractor will need to certify completion and also provide conditional lien waivers, conditional only on payment. As security for its performance, EPC contracts will provide that the project owner may retain a portion of the amount due. This is typically in the 5 to 10 per cent range and is often paid to the contractor upon the achievement of substantial completion, with some held back to cover the cost of punch-list items. In lieu of actually withholding the payment, it is common for the EPC contractor to provide an escalating letter of credit.

vi Contractor security

In addition, the contractor will be required to provide either a payment and performance bond, or a suitable parent guarantee covering all of its payment and performance obligations under the EPC contract.

vii Limits on liability

An EPC contractor's overall liability limit is often 100 per cent of the contract price. It has become increasingly common for this overall limit on liability to step down to a lower amount upon the achievement of substantial completion. Indemnity and warranty are typically carved out of the limitation.

viii EPCM and other pricing structures

Outlined above are the standard material provisions found in most project-financed EPC contracts. There are, however, some deviations, including engineering, procurement, construction, and management contracts (EPCM contracts), which are not wrapped

contracts, as well as alternative pricing arrangements with some sharing of risk. Clients and contractors will often ask if finance can be obtained for these structures. The answer is that finance is potentially available for anything, but the more the structure deviates from the standard and the more risk that the project owner assumes for construction, pricing and schedule, the more recourse the lenders will expect from the project sponsors.

III SUPPLY OR FEEDSTOCK AGREEMENTS

Supply or feedstock agreements are normally significant contracts in a project finance transaction. Almost all projects in this arena require some kind of fuel or feedstock that is converted into a product revenue stream once a project has completed construction and has begun commercial operation. Dramatic swings in feedstock costs can materially affect the value of a project's revenue stream and the feedstock's unavailability can be the death knell of a project.

Supply or feedstock agreements therefore achieve two primary goals. First, they often fix feedstock pricing with either a fixed price or a bandwidth of pricing. This pricing certainty helps lock-in the predictable revenue stream necessary for project financing. Second, and just as importantly, these contracts help ensure the availability of the feedstock necessary for the project to generate its product and therefore generate revenue. Projects of this nature are commonly constructed in remote locations and therefore transportation of the feedstock is also a key component to ensuring its availability.

As with EPC contract pricing, when reviewing supply or feedstock agreements it is critical to understand the circumstances that can change pricing over the term of the agreement. These agreements are typically long-term contracts. The preferred pricing model is a fixed price for the input, subject only to escalation over time. Alternative arrangements include bandwidth pricing with a floor and a ceiling price. The less certain the pricing, the less certain the value of the revenue stream and the more recourse will be required from the project sponsors.

Some inputs or fuels may need to be transported by rail; some may need extensive lateral pipelines; others may need special long-term hauling arrangements. To the extent that rail or lateral pipelines will need to be constructed, the same sensitivity with respect to substantial completion under the EPC contract should be applied to the construction of these transportation facilities. The agreements must clearly set out the third party's obligations to obtain the necessary property rights, permits and approvals for the construction and operation of the facilities, within the schedule requirements necessary to support the substantial completion date of the project.

In conjunction with securing the necessary transportation rights, project owners and lenders will need to be sure that the supply of the feedstock is available to its project when and if needed. As a result, these supply agreements are typically supply-or-pay arrangements, whereby the supplier has the obligation to supply the feedstock at the agreed delivery point or either provide replacement feedstock or pay the project owner damages. The quality of the feedstock is often important as well.

Poor quality input can lead to inefficient production or in some cases premature equipment failure. Supply agreements should, therefore, include detailed specifications for feedstock quality, and put in place procedures to test and ensure the quality specifications of the feedstock being delivered.

Any disruption in the delivery of feedstock meeting the necessary specifications can have a material impact on the project's revenue stream and its viability. It is critical, therefore, for a project owner to contract with reputable creditworthy entities and to enter into agreements with limited and very narrowly defined circumstances of excused performance.

i Operations and maintenance agreements

An operations and maintenance agreement (O&M) provides much of the same function during the operations phase of a project as the EPC contract does during the construction phase. To ensure the predictable revenue stream necessary for a project financing, it is important to fix the costs to operate and maintain the project as much as possible. Much like an EPC contract, pursuant to an O&M agreement, a special purpose entity project owner engages a reputable and credit-worthy service provider to provide all of the operation and maintenance services necessary for the project. Most often these agreements are similar to fully wrapped EPC contracts. Under a typical O&M agreement, the service provider will commence providing services just prior to substantial completion of the project during the project's start-up and testing phase. Once the project achieves substantial completion and commences commercial operations, the service provider becomes the primary entity responsible for the project's operations and maintenance.

The pricing for O&M services is most commonly a monthly fee plus cost reimbursement. Given the significance to the bottom line due to variations in the cost reimbursement portion of the payment, particular attention is often given to the budget process in O&M agreements. Commonly, the project owner and service provider agree in advance on an annual budget and the service provider will not be compensated for cost expenses that deviate from it. The exceptions to this are limited to minor and immaterial deviation amounts, expenses incurred to remediate an emergency or urgent situation, or costs and expenses incurred pursuant to a budget amendment approved by the project owner in advance.

O&M agreements will most often have a term in the five-year range with the potential for extension. Unlike the EPC contract, the project owner will, however, have the right to terminate the agreement without cause prior to the expiration of the term without significant penalty.

Similar to the EPC contract, the O&M service provider will agree to certain performance guarantees including demonstrated availability with liquidated damages for failure to meet the performance guarantees. The liquidated damage amounts are usually materially less than similar liquidated damages under the EPC contract.

The service provider's overall limit on its liability is typically capped at one year's worth of its fees.

ii Long-term service agreements

In many projects, the major equipment used will require major maintenance after a known period of extended use. In gas-fired power projects, for example, certain parts of the gas turbine will require repair or replacement after a predictable number of hours of use. These repairs can be extensive and the resulting outage for this work could have a material impact on a project; so too would the uncertainty of future costs for these repairs. A project owner and the equipment supplier will enter into a long-term service agreement (sometimes called a contractual services agreement) to ensure the vendors' availability to conduct the repair work; to stock the appropriate unique parts; and to fix the cost associated with the repairs. Under that agreement, the project owner will pay the equipment supplier a monthly fee

commencing normally upon substantial completion with a long term of several years. In exchange for this fee, the equipment supplier agrees to perform the planned maintenance services for the covered equipment upon an agreed schedule tied to the operating hours of the project. The services will include all parts, labour and technical services. In some long-term service agreements, the services will also include unplanned maintenance.

These are long-term agreements but they will often include a termination right for the project owner subject to a mutually agreed termination fee.

iii Offtake agreements and power purchase agreements

The agreements discussed above are structured in a project financing to allocate risk and to fix, as much as possible, predictable and material costs. So how do you fix or make predictable a project's revenue stream so that it can be financed? In some instances, given the nature of the project, and its location and the market it serves, there is no offtake agreement or contracted purchaser of the project's product. These types of projects are referred to as merchant transactions. The theory behind the financing is that if it is built, the market for the product is sufficiently known and therefore there is comfort in the value of the revenue stream. Pure merchant projects carry market risk and they are not common. In recent years, many projects in the electric power space have been financed on a quasi-merchant basis. These projects typically receive at least partially predictable revenue for their capacity sales to a regional system operator. Sales for the actual energy generated by the project are then made on the open market. To mitigate this energy market risk further, often hedge agreements are put in place.

The preferred method to fix a project's revenue stream is a long-term offtake agreement. In the electric power sector, these agreements come in the form of power purchase agreements. In an offtake agreement, the project owner agrees with a credit-worthy purchaser to sell all of the project's output to the purchaser for an extended term at set predictable pricing.

Offtake agreements are most commonly take-or-pay arrangements, where the purchaser agrees to pay both for the project's capacity to produce the product as well as for the actual delivery of the product at an agreed delivery point. Capacity payments are normally fixed and tied to the demonstrated capacity of the project. These payments are made monthly whether or not the project generates any product. The initial capacity of the project and the resulting capacity payment amount is tied to the performance-testing results of the project used to demonstrate substantial completion under the EPC contract. It is important, therefore, that the testing protocols and the definitions of substantial completion or commercial operation that are set forth in the offtake agreement align with the same testing requirements and definitions set forth in the EPC contract.

Offtake agreements will include follow-up capacity testing procedures during the term of the agreement and the fixed capacity payment can be subject to adjustment in the event of changes in a project's capacity. In addition, and designed to ensure the availability of the resource to the purchaser, offtake agreements will include project availability requirements. Failure to satisfy availability requirements can lead to damages, pricing adjustments and, potentially, default and termination. The project owner and lenders will need these obligations to be passed through and coordinated with the O&M agreement and the long-term services agreement.

The second revenue stream under the offtake agreement is tied to the actual delivery of the product. These payments are typically not fixed and based upon a formula tied to variable operating costs. Some offtake agreements will include floor-and-ceiling pricing for this component.

The product of the project is often critical to the offtake agreement purchaser. As a result, these agreements will impose significant security obligations on the project owner. The amount of the security will change over time but initially it is common to include a significant amount of security and penalties tied to the completion of the project's construction and achievement of substantial completion by a specified date. It is important here as well that these obligations are aligned with the contractor's obligations to the project owner under the EPC contract.

The offtake agreement is often the most critical document in a project financing because it sets the predictable revenue stream that is the basis of the financing. Therefore, project owners and lenders will need to scrutinise and seek to limit any provisions that can change or waive the purchaser's payment obligations. Defaults and termination events should likewise be clearly and narrowly defined, and limited to material and sustained failures of the project and the project owner.

It should be noted that some offtake agreements take the form of tolling contracts. In such agreements, the purchaser, rather than the project owner, is responsible for the feedstock. In tolling agreements, the purchaser essentially uses the project to convert its feedstock into the product it requires. As a result, these agreements will have significant provisions detailing the coordination of the operations and maintenance of the project.

COUNTERPARTY RISK

*Ben Farnsworth*¹

I INTRODUCTION

The risk attached to counterparties supplying feedstock or offtaking project product are usually termed 'supply risk' and 'offtake risk'. These risks are associated with the inputs and outputs of a project and the failure of suppliers (or users) or offtakers to pay or otherwise perform their obligations. While the risk profile of these issues will be very different depending on the project, some methods of mitigation of these risks through contractual arrangements with suppliers, users or offtakers are similar.

II SUPPLY AND OFFTAKE RISKS

i Supply risk

Many projects rely on raw materials or commodities for a project to succeed. For example, a coal or natural gas-fired power plant requires access and rights to an uninterrupted supply of coal or natural gas. Similarly, a waste-to-energy project relies upon a supply of waste input (and often the gate receipts received by the project as a disposal price will underpin the economics of the project rather than the revenue from power sales).

The prices of these raw materials or commodities can be volatile and their availability for the life of the project may not be assured.

Similarly, any tolling structured project will generally require consistent usage in order to be financed regardless of the sector where the financed infrastructure may be used (e.g., a liquefied natural gas (LNG) train for an oil and gas development, or rail and port infrastructure for a bulk mining commodity project).

In Australia, the project financings of the US\$2.4bn Newcastle Coal Infrastructure Group² and the US\$3.5 billion Wiggins Island Coal Export Terminal (WICET)³ both were underpinned by ship-or-pay arrangements for rail and port infrastructure for coal exportation. US\$2.5 billion of the senior debt for WICET was recently refinanced in challenging circumstances, not least because of the insolvency of three of the eight take-or-pay shippers that underpinned the original financing structure, leaving the remaining shippers

1 Ben Farnsworth is a partner at Allens.

2 'Newcastle loads the deal' *Project Finance International* dated 15 December 2010.

3 'Asia-Pacific Awards' *Project Finance International* dated 18 December 2011.

with a heavier debt load that was supported through their ship-or-pay pricing.⁴ Despite these insolvencies, the nature of the ship-or-pay arrangements allowed for a solvent refinancing, albeit in a challenging context.

ii Offtake risk

An important consideration for any project financier is whether the project will generate the expected revenues from sales of product produced 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 revenue shortfalls, if they occur, will be addressed. Usually, lenders will carry out considerable due diligence on the relevant market for the project product, using market consultants.

To ensure the project generates the level of revenues that the project participants forecasted for the success of the project, proponents will often enter into offtake agreements to contractually allocate the risk to creditworthy offtakers.

iii Price risk and variations across sectors

Counterparty risk is to an extent inseparable from market price risk as it is usually where the price for the relevant commodity being supplied or purchased (or underpinning usage in a tolling model) fails to meet its forecasts where counterparty risk presents a significant issue for a project's financing.

While these risks and issues apply to all projects, there are variations across industry sectors and it is important to consider the risks and mitigation methods that apply in the context of the relevant sector.

III STRATEGIES FOR RISK MITIGATION

i Long-term supply or offtake agreements

The project participants can mitigate both supply and offtake risks by contractually allocating these risks to counterparties through long-term agreements.

On the supply side, a long-term supply agreement insures or guarantees the project company's access to key supplies at a pre-agreed price for an agreed period.

However, it may be that a long-term agreement is not in the best interests 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 purchased 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 the specialist nature of the supplies required. Periodic price review mechanisms provide parties with some protection against market volatility in long-term agreements and the ability to renegotiate a price that is more aligned with the market at the relevant time. However, from a financing perspective this also presents risks as financiers will wish to ensure that forecast pricing is in line with any renegotiated price.

⁴ Allens advises on refinancing of US\$3.5bn Wiggins Island Coal Export Terminal' dated 2 October 2018 (<https://www.allens.com.au/med/pressreleases/pr02oct18.htm>).

On the revenue side, ideally from a project financiers' perspective the project proponents will secure a robust offtake contract on a take-or-pay or other firm basis. The offtake contract may take the form of a power purchase agreement (for a power project), a gas or LNG sales agreement (for an LNG project) or a sale agreement (for a mining project).

In a take-or-pay agreement, the buyer must take and pay for or alternatively pay (as liquidated damages) the contract price even if it does not buy or use the entire agreed amount of the relevant product being produced by the project. Where any such payment is made, the purchaser is sometimes entitled to receive an equivalent amount of product at a later date.

Similar to a supply agreement, offtake contracts are typically for a pre-agreed period at an agreed price. However, project products may be highly or somewhat commoditised or marketable (or both) such that sales on a shorter term or spot basis at prevailing market prices may be more appropriate or achievable for the relevant products' market. This will be particularly so where the project product is highly traded or where there are a large number of potential buyers as opposed to products for which there is a limited market and associated pool of potential offtakers available.

Pricing under offtake agreements may be critical and, depending upon the particular project product and its market, project financiers may require price certainty or may take some or all market price risk but seek certainty around volume of offtake to gain assurance regarding revenue flow.

Depending upon the market for the project product, a priority for the project company may be entering into appropriate marketing arrangements. Often, project sponsors (or their relevant marketing affiliates) will act as a marketer of project product and sell the product on behalf of the project participants as they may have relevant experience, relationships and portfolio that they can utilise in return for a fee or alternative remuneration or benefit (for example, the right to purchase or sell a volume of product).

ii Selecting a qualified supplier, user or offtaker

The supplier or offtaker must be creditworthy and financially sound so that the likelihood of it suffering a cash flow issue or insolvency event is minimised. Similarly, where a project company is particularly dependent on the skills of a marketer, the financiers will likely be concerned to verify the financial health of, and ongoing participation by, that entity.

On the supply side, 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 that is able to source the materials from less volatile places, if required.

Where offtake agreements are entered into after closing, financiers may require that any offtaker have a minimum credit rating or otherwise satisfy minimum financial standing tests.

Often the financiers' relationship with the offtaker group will be critical to the bankability of project financings for resources projects. Offtake arrangements into the financier's home country may determine eligibility for certain export credit agency or development bank support and long-term access to commodities for home markets may be an important policy consideration for those institutions. Similarly, commercial banks normally will be more attracted to and far more likely to support a project financing where the contracted offtaker for the project has an existing relationship with the bank. Often financially strong offtakers may play a significant role in securing financing for junior resources companies through their connections and relationships.

Sometimes supply or offtake will be entered into by project sponsors or their affiliates, which is a significant risk mitigant as financiers can be confident that equity interests and

suppliers' or offtakers' interests are aligned in supporting a successful project. Sponsor commitment supports other contractual involvement in a project generally, and is often a key assessment criteria for financiers. While understanding of the sponsors' need for flexibility in recycling capital, financiers often will be keen to ensure that key suppliers, users or offtakers commit to retaining an equity participation in a financed project over its term.

For example, the US\$24 billion Ichthys LNG project supported US\$20 billion in limited-recourse financing from export credit agencies and bank lenders. At the time of the financing, the project was owned by a sponsor group led by Inpex Corporation of Japan and Total SA of France. Ownership interests were also held by affiliates of Japanese utility companies involved in the offtake of LNG from the project including Tokyo Gas Co Ltd (1.575 per cent), Osaka Gas Co Ltd (1.2 per cent), Chubu Electric Power Co Incorporated (0.735 per cent) and Toho Gas Co Ltd.⁵

Two Japanese consortia together account for almost 60 per cent of the offtake, with CPC Corporation taking approximately 20 per cent. The balance of the LNG offtake will be taken by the Inpex and Total groups.⁶

iii Deliver: use-or-pay or take-or-pay provisions

Often project participants will seek to enter into take-or-pay or liquidated damages arrangements for failure to supply or take offtake to underwrite a financing.

Supply agreements will generally include damages regimes for failure to make supply available.

In contrast, tolling or merchant arrangements, where the infrastructure company typically takes low project risk, provide for a limited reduction in fees payable to the infrastructure provider if the infrastructure or services are not available to users. Use-or-pay provisions are included in tolling agreements to provide the project company with a minimum assured revenue stream to ensure adequate returns from the capital investment. If the returns from the tolling arrangements are considered too low to compensate the infrastructure operator for early-stage construction or technical risk (or both), the operator may seek greater exposure to the rewards (and risks) of the whole project through participation in production or marketing.

These type of contractual arrangements and project structures may also be used where it is commercially favourable to isolate and separately finance the relevant infrastructure without the lenders being exposed to upstream development risk. For example, the Australia Pacific LNG project financed only the LNG downstream infrastructure and the upstream development was funded by equity. Gas was supplied under the Master Gas Supply Agreement entered into between the seller of gas derived from the upstream coal seam gas fields, and the borrower, as the buyer of gas for processing into LNG.⁷ Similarly, financing FPSO projects on a tolling model would allow for similar risk insulation from upstream risks.

Sometimes, the nature of the supplier will be such that minimum amounts are not achievable and any commitment to supply may be limited to the particular input available.

5 'Ichthys LNG Project Completes Project Financing Arrangements' media announcement by INPEX Corporation dated 18 December 2012 (https://www.inpex.com.au/media/1104/18_12_2012_ichthys_lng_project_completes_project_financing_arrangements.pdf).

6 'Ichthys LNG – The biggest, ever', PFI *Project Finance International* 500th Edition Special Report March 2013 (www.pfie.com/ichthys-lng-the-biggest-ever/21071972.fullarticle).

7 'Australia Pacific LNG – A case study' dated 13 March 2013, *Project Finance International*.

For example, in waste to power projects, regional or local government entities are often unwilling to take risk (and potential liabilities) relating to amounts of waste produced so may only commit to supply what is produced. In such circumstances, financiers may need to rely on market supply forecasts to assess the supply risk.

In the case of offtake agreements, a robust take-or-pay provision (for price and volume) will require the buyer to take delivery, other than where that failure is solely attributable to the actions of the seller, and the buyer is not otherwise excused from taking delivery under the relevant offtake agreement (e.g., circumstances of *force majeure* may excuse the buyer from taking delivery). Generally, if a traditional take-or-pay model is adopted, then a buyer will be required to pay the project company if it fails to take and has a right to receive an equivalent volume of product at a later date.

An alternative model that is common in liquid markets and increasingly common in the oil and gas industry is for the seller to receive liquidated damages in an amount equal to the seller's direct damages arising as a result of the buyer's failure to take or an agreed percentage of the quantity of product scheduled to be delivered multiplied by the expected price of the product. The buyer's obligation to pay those damages can be triggered on an annual, monthly or per cargo basis depending on the nature of the product being sold.

A project company (as seller) may have some obligation to mitigate its losses. This is particularly the case for less marketable products such as, for example, speciality metals where the total market for each metal is small, dominated by few producers and easily disturbed by new large producers. If possible, care should be taken to ensure that a project company's contractual obligation to sell in mitigation does not require it to prejudice its broader commercial or strategic interests, including the impact on the market pricing for the product, or the supply and demand of the product. It should also be noted that even where there is no contractual obligation to mitigate losses, an obligation to use reasonable endeavours or some other standard to do so may be implied at law. Generally, liquidated damages are calculated by reference to estimated direct damages.

Any cap on take-or-pay liquidated damages should also be closely considered. For highly traded products a lower cap may be acceptable, whereas for less liquid products a 100 per cent cap may be desirable. Higher caps also apply in the case of wilful default or gross negligence and may be used as a mechanism to disincentivise parties acting in their own commercial interests. Reciprocity between the seller and buyer or user in respect of the damages caps should be carefully assessed.

Pricing

Pricing negotiations will often be challenging in take-or-pay arrangements. Project financiers will ideally want to achieve price certainty for the projected production sufficient to service debt. It will come as no surprise that long-term fixed prices are usually not reflective of the normal practice in commodities markets.

In many cases, the market pricing convention is sufficiently established that market participants will not be willing to agree to depart from it and financiers may consider a market sufficiently established that they are willing to accept some pricing risk. For example, financiers may accept gas and LNG price risk for projects (set against the usual market indices such as, for LNG, Henry Hub, S-Curve, Brent or JCC), but may seek some comfort on volume of offtake.

However, where markets for particular project products are not as developed and future pricing is less certain project financiers will often seek a floor price for offtake contracts

(perhaps subject to an escalation mechanism such as CPI). Understandably, this will usually be the subject of significant negotiations with offtake counterparties. Offtakers will understandably usually resist a floor price under which they absorb the risk of a downturn in market pricing. Sometimes offtakers, particularly in shallower markets where the relevant market may be dominated by a small number of buyers, may expect that any agreed pricing will include a price ceiling as a quid pro quo for their support of a particular project and their provision of some certainty around offtake volume. There may be sound commercial reasons for the buyer's position. It may be the case that, for example, the buyer is a particularly strong counterparty, enjoying a degree of market power, and they risk prejudicing their existing supply arrangements through entering into a future offtake arrangement to support a development project that is not yet in production.

From a project proponent's perspective, often they may be unwilling to trade the benefit from a potential commodity price increase (e.g., through a price ceiling) for the reciprocal downside protection of a price floor that project financiers require. This might be a difficult compromise to accept if a proponent's equity investor base is motivated by potential commodity price rises.

Other provisions

Project financiers should beware of other contractual provisions that may compromise pricing or volume.

For example, in minerals projects, the calculation of any deductions in relation to items such as separation and refining costs, and distributor margin should be carefully considered as well as their mechanisms for verification. It should be considered whether any pricing adjustments can be fixed for greater certainty.

A right of rejection for out of specification product is often a feature of commodity sale agreements. The ability to reject volume for specification reasons should be carefully considered and technically assessed, together with rights to claim compensation if this arises. This is particularly important in projects where the delivery of off-specification product may have a significant impact on other customers or related project infrastructure.

In addition to direct assignments, consideration should be given to whether change of control provisions to regulate indirect transfers should be included. Whether these should be restricted will largely turn on the creditworthiness of the supplier or buyer and whether a parent company guarantee or some other form of credit support is provided by the supplier or buyer. Consideration should also be given to the extent to which the project relies on the technical or operational capability of the counterparty (or other members of its group) as this may be another reason to limit a party's right to transfer.

Force majeure events that relieve the supplier or the buyer of their obligations, particularly any take-or-pay, deliver-or-pay, or use-or-pay obligations, should be carefully considered. Often there will be a limited extension of the supply or purchase term. Usually, *force majeure* provisions would also allow for termination in circumstances of prolonged *force majeure*. It is worth noting that market practice in respect of force majeure will vary across sectors. While use-or-pay contracts for infrastructure projects typically include very limited relief for the user from the obligation to pay for capacity, in the minerals or LNG sectors relief may generally be more broadly permitted.

It should at least be ensured that any supplier or buyer will not be entitled to claim that a change in market conditions is a *force majeure* event and no economic hardship or equivalent provisions should be included for their benefit if a deliver-or-pay or take-or-pay

obligation is to be robust. To the extent possible, *force majeure* provisions should be carefully checked against insurance coverage to ensure any gaps in supply or revenue risk mitigation are closed or identified for consideration.

Other provisions that should be carefully considered include sanctions and anti-corruption provisions that may allow counterparties to suspend or terminate obligations in a broad range of circumstances, which may not be in the buyer's or the seller's (or the financier's) commercial interests.

In relation to revenue risk, whether the commodity is sold FOB (free on board) or ex-ship, lenders will wish to understand the details of how the shipping will be arranged and any risks involved. Each step of the supply chain is critical in ensuring that the cash flows from the project are sufficient to repay project debt.

iv Hedge agreements

Commodity price-hedging agreements (through swaps, options or forward sales) may allow the project entity to receive payment from a third party if the price for the project's output on the spot market falls below a certain amount. Alternatively, hedging agreements may allow the physical delivery of the product into a fixed price (or a price floor), also mitigating downside price risk.

Whether commodity price hedging is available for the particular project commodity will depend upon the depth of the market and the corresponding willingness of market to make hedge providers (typically banks) accept commodity price risk and, indeed, pass some of that risk off to others.

Precious metals have relatively deep hedging markets and while project financiers may be willing to take offtake risk in respect of these metals because of the deep markets and relative predictability of future pricing, they may insist that some or all of the price risk is hedged through commodity price hedging depending upon the maturity profile and debt sizing of the project. On the other hand, metals such as iron ore have a shallower hedging market where hedging may only be available for a relatively short period of less than 12 months. While that hedging market may develop over time, that will not be sufficient to significantly mitigate price risk on a project that has an expected mine life of 20 to 30 years or longer. On the other hand, because of the lack of market clarity for some metals there may be no hedging available.

v Cash sweep and reserve accounts

As mentioned above, 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 be required by the financiers to set aside cash in a secured account designed to be used where volatile revenues are insufficient to meet debt service obligations.

Of course, this type of reserving of cash will often come at a cost to the equity participants in the project company so the scope of the arrangements is likely to be heavily negotiated or resisted by project proponents.

A cash sweep under which financiers share a percentage of the excess cash flow of a project, together with equity participants, that is then applied to mandatory prepayment of finance debt will also help mitigate the risk of volatility in commodity prices and is accordingly a feature of many resources project financing structures.

vi Contractual terms

A project financier needs to have an understanding of the key contractual risk mitigants that may be built into relevant contracts to mitigate counterparty risk as well as what is acceptable and achievable in the particular market and the trends at the time.

For example, in the LNG market there has been a trend in LNG sales agreements towards shorter term contracts and a more liquid and developed spot market. In this context, financiers may be more willing to accept some LNG price risk based on a suite of long-term and short-term supply contracts. Similarly, we have seen financiers be more willing to consider offtake arrangements without take-or-pay arrangements. Suppliers (and financiers) will rely upon the usual damages calculations for failure to take cargos against a more liquid spot market to underpin revenue risk. Typically, in this case the LNG sales agreements require the counterparty to pay the full value of a cargo that it fails to take and the seller is obliged to return the net proceeds of any sale to the buyer. So, the seller maintains revenue flow in this way.

In a more standard take-or-pay contract where the buyer has an annual rather than a per cargo take obligation, LNG sellers may require shorter term take-or-pay settlement periods of six rather than 12 months, which was more usual in the market to ensure that payments remain current and credit risk is more tightly managed.

Also, as new and less well established buyers enter the market, we have seen the LNG offtake market move towards requiring credit support such as letters of credit or parent company guarantees up front rather than relying upon contractual provisions that allow for a seller to require credit support upon the occurrence of a negative counterparty credit event. In most LNG sale and purchase agreements, the seller has a right to suspend performance if there is a payment default, or if a letter of credit or parent company guarantee is not made available within the required timeframe. During the suspension period typically the buyer is considered to be in default and the seller is free to sell the product that would otherwise have been taken by the buyer. This preserves the seller's revenue stream and also enables it to claim damage for any losses from the buyer.

vii Letters of credit, parent company guarantees and other performance security

Letters of credit are a widely used means of guaranteeing payment and liquidated damages for performance, particularly in international trade. In Australia, bank guarantees often serve the same function. Letters of credit are often required to enhance counterparty credit risk, both in terms of financial credit standing and in terms of practicality of recovery against counterparties outside of the sellers' home jurisdiction.

Letters of credit are carefully drafted to be irrevocable and unconditional, and are intended to provide the highest degree of payment security (subject, of course, to the credit standing of the issuer).

Accordingly, requirements in relation to the creditworthiness of the issuer are worthy of attention (e.g., that the issuer be a financial institution of a certain minimum credit rating and that the letter of credit be replaced if it is downgraded below that minimum rating).

The following practicalities of claims should also be considered:

- a* The letter of credit should be in place before costs are incurred or at least before the product is loaded or delivered.
- b* The amount of the letter of credit should be considered closely within the market context. For example, in the context of mining commodities, the amount of a letter of credit may be set higher than the shipment value to cater for non-payment issues such

as demurrage. For certain commodities, 115 per cent of the shipment value is market standard, although sometimes the percentage is set at less than 115 per cent (but it is usually a minimum of 100 per cent).

- c* A claim should be able to be presented at an office at a convenient jurisdiction.
- d* The expiry date of the letter of credit (or other instrument) should leave sufficient time to consider and make a claim if the relevant obligation is not met. A letter of credit expiring before a counterparty is able to claim under the terms of the relevant contract can cause significant detriment to project proponents, and their financiers, but it is not a scenario that has been unheard of.
- e* If the letter of credit requires documentary presentation it should be ensured that those documents (such as a demand in the relevant form) can be obtained without cooperation from the counterparty.
- f* In some jurisdictions there are insolvency law advantages to direct pay (rather than standby letters of credit) that can remove any argument of preference risk.
- g* Ideally the issuer of the letter of credit (or other performance support) will be required to satisfy the claim immediately or in a very short period of time to reduce any risk that the counterparty providing the letter of credit might take legal action to attempt to thwart payment, such as an injunction based upon a counterclaim.
- b* From a financier's perspective, effective security over the letter of credit should be considered including whether the security agent should be the named as a beneficiary.

In some markets, insurance bonds are increasingly being used as performance security in place of letters of credit or bank guarantees. These are insurance products for which a premium is paid and cross-indemnities are given. As between the insurer and the party providing the bond, no cash collateral or less than 100 per cent cash collateral may be required, providing cash-flow benefits to the party giving them. Insurance bonds are generally considered riskier security, and financiers should be careful to ensure that these are in fact irrevocable and unconditional if they are accepted as a replacement to traditional bank letters of credit.

Parent company guarantees are another common way of enhancing a counterparty's credit standing. Often supply or offtake agreements may be entered into by operating subsidiaries of corporate groups. While an operating subsidiary may have sufficient credit standing for the ordinary course of trading of the counterparty group, where the supply agreement or offtake agreement is for a particularly long term or for a very significant value then project financiers may require the enhancement of the credit of the subsidiary where the subsidiary's own assets and business are not sufficient to support the relative counterparty risk. Alternatively, credit-enhancing guarantees can be provided by other affiliates of the relevant counterparty.

The terms of any guarantees should be carefully considered, for the following issues, among others:

- a* parties to a guarantee will often negotiate whether the guarantee is a primary obligation (allowing recovery from the guarantor directly without reference back to the underlying contract and without the need to sue under that contract for breach) or more usually in this context a contingent obligation;
- b* any separate limitation of liability under the guarantee should be carefully considered, as should rights of set-off and counterclaim; and
- c* the guarantor should consent and agree to any changes to the underlying agreements to ensure the guarantee is not compromised.

viii Insolvency laws

A project financier should also consider the impact of insolvency laws on relevant counterparty risk positions.

For example, Australia has recently introduced as of 1 July 2018 *ipso facto* insolvency legislation designed to provide greater opportunities to restructure failing businesses during external administration. This legislation restricts the enforcement of contractual rights (including termination) triggered by certain insolvency events.

Without examining the legislative provisions in detail, the legislation may result in a project counterparty not being able to terminate a long-term supply agreement or commodity sales contract solely for the insolvency of its counterparty, without a performance breach. While there will usually be some sort of performance breach in due course, this legislation could make management of counterparty insolvency (and the replacement of the relevant contract) more challenging.

Australia is not alone in a global trend towards implementing legislation aimed at assisting the restructuring of businesses and preserving jobs. Accordingly, the relevant legal framework should be considered in assessing counterparty risk.

LENDER RELATIONSHIP WITH PROJECT COUNTERPARTIES

David Armstrong and Gregory Howling¹

I INTRODUCTION TO PROJECT AGREEMENTS

Central to any project financing are the project agreements or project documents – the contractual arrangements of the borrower for the development, construction, operation and maintenance of the underlying project. Depending on the status and type of the project, project agreements may include construction contracts, supply agreements, operation and maintenance agreements and offtake agreements, among others. It is imperative for lenders to understand, evaluate and preserve the project agreements because (1) they are the primary components of the project's value throughout the life of the project; (2) they form the basis for credit extensions under the credit facility (whether during construction in the form of construction loans and letters of credit to support the borrower's performance obligations under the project agreements or during operation in the form of working capital loans and letters of credit for similar support); and (3) lenders receive a security interest in them as part of the non-recourse financing structure.

Unlike other secured lending transactions, the value in a project financing is the revenue stream from the project more so than the value of the physical assets themselves. To a lender, maintaining the project as a going concern, and therefore maintaining the contractual rights and relationships that allow the project to be built (on time and on budget) and to operate, both during the term of the facility and in the event of foreclosure, is a key element of any transaction.

Further, the obligations of the borrower under the project agreements create the basis for certain credit facilities and extensions. For example, under many project agreements, since the borrower is not an otherwise creditworthy entity, the borrower may be required to provide performance security to its counterparties. In lieu of providing cash security, the borrower will look to lenders for a letter of credit facility pursuant to which lenders will issue required letters of credit to the project counterparties as beneficiaries thereunder. For projects under construction, the construction contracts will contain key milestones and conditions to payments and, by extension, draws under the credit facility. Consequently, it is important for lenders to understand the terms of such project agreements and ensure that such agreements are not amended or otherwise modified, including through change orders during construction, without their consent.

Given the importance of timely construction of the project (on budget and in accordance with the performance parameters established in the underlying construction contract), the project's continued operation, and the non-recourse nature of project financings, lenders

¹ David Armstrong is a partner and Gregory Howling is an associate at Skadden, Arps, Slate, Meagher & Flom LLP.

typically require a grant of a security interest in all project contracts of the borrower as part of the collateral package. As a result, in the event of a foreclosure on the assets of the borrower, lenders (though their agent or another designee) are able to take assignment of project agreements. For that assignment upon foreclosure to be effective in practice, lenders must understand whether the project agreements permit such assignment and, most importantly in the cases of material agreements, they must seek contractual privity with counterparties to receive those counterparties' prior consent to any foreclosure action and to negotiate any interim rights for the lenders (or their agent or another designee) to step in and cure defaults prior to exercising the last-ditch option to foreclose.

For lenders, evaluating and preserving the project agreement structure and mitigating possible risks associated therewith is addressed through due diligence, the finance documents with the borrower and, in many cases, with direct agreements with the applicable project counterparties. These are not mutually exclusive options and lenders do, and should, use them in combination with each other.

II UNDERSTANDING AND EVALUATING THE PROJECT STRUCTURE THROUGH DUE DILIGENCE

The first step in any project financing is due diligence of the borrower and the project, including understanding and evaluating the project agreements and project counterparties. Due diligence, even with respect to project agreements, is a multifaceted process. Through consultants, counsel and internal experts, lenders will evaluate market risk, construction risk, operational risk and contractual risk, among others. In each facet of diligence, the analysis will inevitably turn to the project agreements and the risks thereunder, risks that relate to non-performance of both the borrower and the counterparty. Similarly, in transactions where project agreements form a basis for part or all of the credit facility, such as facilities under which letters of credit will be issued or where payment obligations under construction contracts require draws by the borrower, lenders should evaluate the circumstances, timing and likelihood, of draws on the applicable loans or letters of credit.

While diligence allows lenders to understand the overall picture of project agreements applicable to the project, it also, importantly, allows lenders to determine what project agreements are material. In evaluating materiality, lenders typically look at a given contract's impact on the construction of the project, the projected performance of the project, the revenue stream of the project during operation (i.e., the financial impact of a termination or other impairment of the applicable project agreement) and the replaceability of the contract (i.e., in the case of a supply or an offtake agreement, the presence of a robust spot or merchant market, or more generally, the willingness of other creditworthy counterparties to enter into replacement contracts on similar terms). Essentially, if the borrower's contractual rights under a particular project agreement are necessary for the timely and cost-effective construction of the project, the operation of the project in accordance with applicable law or the maintenance of the revenue stream of the project, and the project agreement cannot quickly and readily be replaced with a comparable contract, that project agreement will be considered a material contract. As a practical matter, material contracts are likely to include key construction contracts, offtake agreements, interconnection agreements (if applicable), operations and maintenance agreements and services agreements. As will be discussed in further detail below, the designation of a contract as material will generally result in the

application of specific conditions, covenants and events of default under the financing documents and in a requirement that such contract be subject to a direct agreement with the lenders (or their agent).

While there are basic elements of diligence applicable to every project, the rights of lenders during the diligence phase to mitigate risks and how information gathered during the diligence phase is used is heavily dependent on the status of the project (i.e., whether it is yet to be constructed or is in operation).

For a construction project, the legal due diligence phase for a project financing will often consist of reviewing advanced drafts of, rather than executed and effective, project agreements. With the agreements still subject to negotiation between the borrower and its counterparties, lenders can identify red flag risks under the draft agreements and work with the borrower to mitigate those risks through changes before execution. Those changes may include, for example, modifying counterparty termination rights, increasing counterparty performance security obligations or agreeing to a form of direct agreement. In the event that those changes are not accepted, or the applicable project agreement has already been executed, the lenders may still address such points through the terms of the loan agreement, namely the covenant package, and the direct agreement with the counterparties (in which modifications to the applicable contract can sometimes be agreed, rather than through an independent amendment).

In financings for operating projects (or projects nearing operation), the project agreements have typically been fully negotiated and executed. As such, there is limited ability for lenders to request changes to any particular project agreement (though, in the case of a fatal flaw, lenders may still require modifications to a contract). Instead, the primary risk mitigant for lenders for an operational or near-operational project is through the covenant package and the direct agreement.

Due diligence, whether on a to-be-developed or an already developed project, allows lenders to identify and evaluate the project agreements and the potential risks resulting therefrom. And, most importantly, with this knowledge, it shapes the terms of the financing documents, including provisions in the credit agreement such as the representations, conditions precedent, covenants and events of default, as well as the terms of the direct agreements and from whom such direct agreements shall be required. Such due diligence may also result in requirements for sponsor credit support to address certain risks in the project agreements that cannot be addressed through such provisions and direct agreements.

III PRESERVING THE PROJECT AGREEMENT STRUCTURE THROUGH CREDIT AGREEMENT PROVISIONS

A broad understanding of the project agreements, including what are and are not material project agreements and the risks thereof, as achieved through diligence, primarily impacts four key sets of provisions of a credit agreement in any project financing: the representations and warranties, the conditions precedent, the covenants and the events of default.

i Representations and warranties

Through the representations and warranties, lenders seek to receive factual statements about the project agreements and the performance of the borrower and counterparty thereunder. Typical representations and warranties with respect to project agreements include a list of all agreements to which the borrower is a party, a statement that all project agreements are in full

force and effect and there are no other project agreements than those that have been provided to the lenders, a representation that, to the borrower's knowledge, the counterparties' representations and warranties in the underlying project agreements are true and correct, a representation that all information provided by the borrower to the lenders' third party consultants is true and accurate in all material respects, and that there is no default or other adverse events (such as force majeure) under the project agreements. Lenders will also seek a representation from the borrower that the financing will not contravene or result in a lien under the project agreements.

While the inclusion of representations and warranties covering the above matters is standard, there are still significant points of negotiation between lenders and the borrower. In a perfect world from a lender's perspective, all representations could be given as 'clean' representations – that is, the representations would not be subject to any qualifications. However, particularly in the case of representations that speak to the actions or statuses of other parties, borrowers resist giving them without qualification. In the case of representations relating to project counterparties, the parties often agree to limit the representations as to the status or actions of counterparties to the extent the borrower has knowledge of such facts. However, to the extent that a representation pertaining to a project agreement is within a borrower's control – for example, a statement that the borrower is not in default under a given project contract – lenders should resist any attempt to include a knowledge qualifier. Further, borrowers will negotiate thresholds for representations requiring the listing of project contracts and may also seek to limit non-contravention and no lien representations to only the agreed material project agreements. Finally, borrowers will seek to subject their representations to a materiality qualifier. This qualifier can take the form of general materiality (e.g., that there are no material breaches under the project agreements) or material adverse effect (MAE). While MAE is an often heavily negotiated concept, at its most basic level, an MAE qualifier means that the representation is true and correct except for non-disclosed items that do not have a significant impact on the operations of the project or borrower. As such, MAE is a much higher standard than general materiality and lenders are resistant to its liberal use in representations, particularly with respect to important project agreements.

Representations and warranties for project agreements serve several purposes. First, they act as a confirmation of diligence. The list of project agreements proposed by the borrower (typically attached as a schedule to the credit agreement) should confirm the lenders' understanding of the complete contractual arrangements for the project and, in instances where there are discrepancies, allow lenders to conduct diligence on any newly disclosed contracts prior to execution of the financing documents. Second, accuracy in all material respects of representations and warranties is typically a condition to the effectiveness of the credit agreement and to each extension of credit thereunder. Finally, as discussed more below, a breach of a representation (occasionally subject to a cure period) in any material respect is universally an event of default under a credit agreement.

ii Conditions precedent

The conditions precedent to a credit agreement provide another opportunity for lenders to address risks associated with project agreements. Conditions precedent are actions or events that must occur prior to the effectiveness of a lender's (or other creditor's) obligations to extend credit under the applicable debt documents. Typically, there are several customary conditions precedent in respect of project agreements that the parties will expect to include in the credit agreement. These conditions include, among others: the execution and delivery

of direct agreements with specified counterparties and delivery of any legal opinions required thereunder, receipt by lenders of all validly authorised and executed project agreements (which such project agreements must be in a form satisfactory to lenders), a requirement that the project agreements are in full force and effect without any undisclosed amendments, and compliance with and no default under the project agreements by the borrower and the counterparties thereto. Additionally, as mentioned, lenders will expect the borrower to certify that all representations and warranties (including those related to the project agreements and counterparties) are true and correct in all material respects.

The intent of these customary conditions precedent is fundamentally to ensure the lenders' comfort and satisfaction with the form and status of the project agreements, and with the borrower's and its counterparties' performance thereunder. Further, lenders seek to ensure that all documentation with respect to the relationship between lenders and project counterparties is in full force and effect and has been provided to the lenders – in other words, the lenders want certainty that all important project agreements were provided to them during the diligence process and that the lenders have any required rights (through a direct agreement) under material project agreements. In each case, lenders want to establish a satisfactory system prior to incurring exposure to the borrower.

In addition to the above, lenders may also seek bespoke conditions precedent (e.g., delivery of certain amendments of or additional credit support by the counterparty under a project agreement). These conditions precedent will be developed in the course of diligence and will address risks specific to the project or its project agreement that lenders deem unacceptable, and so must be addressed prior to the effectiveness of any project financing.

iii Covenants

Having evaluated the project agreements through diligence (and negotiated the corresponding representations and warranties) and established acceptable conditions precedent for funding, lenders turn to the covenant package of the debt documents to preserve the project agreements arrangement during the term of the financing. Project agreements are addressed in both the affirmative covenants and negative covenants found in any project finance credit agreement.

Affirmative covenants

Through affirmative covenants, lenders seek to require the borrower to take specific actions in respect of the project agreements. In the information covenants (a subcategory of the affirmative covenants), the borrower will be required to deliver to lenders certain notices or other correspondence received or delivered by the borrower in respect of the project agreements. Such notices include: notices of default or breach under the project agreements, notices of force majeure or other material events (such as casualty or condemnation events), and notices of any action or threat of action against a material project counterparty. In some cases, especially in transactions involving new technology or where greater oversight is needed, lenders may also require borrowers to provide lenders with copies of all correspondence outside the ordinary course of business under the project agreements. In all cases, these information covenants allow lenders to remain promptly informed of any material developments at the project.

In addition to the delivery of notices and related information, the affirmative covenants commonly include a requirement that the borrower comply with its obligations under the

project agreements. Further, if the borrower enters into any additional or replacement project agreements, the borrower will be required to take all such actions necessary to ensure that such agreements become subject to the lenders' security interest.

Finally, the affirmative covenants may also include covenants specific to the project's status and nature of the financing. For example, if a key project agreement expires prior to the maturity of the debt facility, lenders may require the borrower to exercise any extension options under the agreement or otherwise enter into a replacement agreement with terms and a counterparty acceptable to the lenders.

Negative covenants

In respect of the project agreements, the most important covenants are the negative covenants. Generally speaking, these negative covenants prevent the borrower from taking, without lender consent, certain actions that would otherwise disrupt or materially alter the basis upon which the lenders lent to the project. Central to this protection is the covenant against termination of, or material amendment to, the project agreements, which restricts (subject to exceptions and materiality qualifiers) the borrower from terminating, amending or modifying a project agreement. This covenant also typically restricts the borrower's ability to assign or permit a counterparty to assign its rights under a project agreement. Finally, it is common for the covenant to prohibit the borrower from granting any consent or waiver in respect of a material obligation under a project agreement. For a project under construction, this covenant will generally also prevent material change orders under any construction agreement, so that changes to the construction schedule or cost (which function like amendments to the main construction contract) are subject to lender approval. This covenant is generally subject to three qualifiers.

First, it will only apply to those project agreements that were agreed as material. Second, borrowers often negotiate replacement rights. These replacement rights usually permit some time period during which the borrower, without breaching the covenant, can enter into an acceptable replacement contract (with an acceptable counterparty) if the original contract is terminated early. The lenders and the borrower may even pre-agree to a form of acceptable replacement contract that is attached to the credit agreement, or that must contain certain terms that are addressed in a schedule to the credit agreement. The replacement rights can be conditioned on the borrower executing a replacement agreement with a specified counterparty, a counterparty with specified levels of technical expertise and creditworthiness, or one that is otherwise acceptable to lenders. Third, the covenant generally prohibits only actions that would have a materially adverse effect on the borrower, with the extent and nature of that materiality qualifier often varying according to the overall importance of the underlying project agreement.

As indicated above, the qualifiers and the covenant generally often do not equally apply to all material project agreements. For instance, in the case of particularly important project agreements, the borrower may not be permitted to replace the agreement. Further, in the case of such an agreement, the lender consent threshold may be a super majority, instead of a simple majority consent, or the material adverse effect qualifier would not apply (such that lenders get a say over any amendment to or waiver under such contract, however important).

There are two additional negative covenants generally applicable to project agreements in a project financing. First, there is a prohibition on settling or compromising any material claim against a project party. This covenant is generally qualified by materiality, in that the project party has to be a material project party (e.g., construction contractor, offtaker or

material service provider). Second, the negative covenants typically include a covenant that prohibits the borrower from entering into any new project agreements involving new project expenditures. As with the other negative covenants, this covenant is also commonly subject to certain exceptions. In this case, the borrower will negotiate agreed individual and aggregate thresholds for contract expenditures before the covenant is applicable or, if such expenditures exceed those thresholds, a material adverse effect qualifier. The parties can also negotiate the term for any new contract under which these expenditures are incurred that must elapse before the covenant is triggered – for example, the parties may decide that new expenditures governed by a contract with a term of less than a year are sufficiently immaterial to avoid running afoul of the covenant.

As with the other credit agreement provisions, the lenders may also require additional negative covenants based on project-specific material issues (e.g., a prohibition on the borrower materially amending credit support received from counterparties).

Events of default

The last section in a credit agreement that involves the project agreements is the event of default provisions. There are several standard events of default that implicate the project agreements or project counterparties.

First, there is a breach by the borrower of a representation: this event of default is most commonly subject to a materiality qualifier (i.e., the applicable representation is breached in any material respect) and in some cases a cure period. Second, there is a breach by the borrower of a covenant in the credit agreement. Depending on the covenant, the borrower may be granted a period to cure the breach – though as matter of practice, since they are entirely within the control of the borrower, negative covenants are not subject to cure periods. In the case of affirmative covenants applicable to the project agreements, the borrower is almost always granted a cure right.

Third, there is a default by the borrower or a specified project agreement counterparty under a project agreement or direct agreement, or the failure of any such project agreement or direct agreement to be in full force and effect. In this case, the event of default is typically limited to material project counterparties. Further, the borrower often has a cure right for defaults or breaches of material project agreements by the applicable counterparties. This cure right, which allows the borrower an agreed period of time to pursue remedies against the defaulting counterparty, may be subject to additional qualifiers such as maintaining a certain financial covenant, funding any shortfalls in reserve accounts or unreimbursed letter of credit drawings and certifying to no other defaults or events of default under the credit agreement.

The final relevant event of default is an insolvency event of a specified project counterparty (e.g., the counterparty voluntarily or involuntarily files for bankruptcy). The counterparties implicated by this standard event of default are often the offtaker, the operator of the project and, in the case of a project under construction, the main construction contractor. However, this list may vary depending on the nature of the contractual arrangements of the project. Unlike the bankruptcy of the borrower, or any pledgors or guarantors (which results in an immediate event of default), typically, there is an agreed period of time after the project counterparty experiences the insolvency event before a default occurs under the credit agreement, and, often, the counterparty's continuing performance of its obligations under the underlying project agreement during the bankruptcy may prevent the occurrence of the event of default. Further, the borrower is often granted a replacement right to replace the

insolvent project counterparty. As with the cure right for project agreement defaults, the borrower often must meet additional qualifiers similarly to those detailed above to benefit from the replacement right.

The events of default described herein as well as the other credit agreement provisions discussed above reflect how central the project agreement structure and the prompt performance by all project counterparties and the borrower of the terms thereunder are to a financing. As noted above, lenders seek to use the credit agreement to ensure the borrower preserves this structure, as it forms the basis upon which the lender is extending credit, while at the same time granting the borrower reasonable flexibility to satisfactorily replace or cure problematic project agreements and counterparties. If the structure or performance of obligations drastically changes, lenders use the credit agreement provisions to prevent further exposure to the borrower.

IV ESTABLISHING CONTRACTUAL PRIVACY THROUGH DIRECT AGREEMENTS

The final tool that lenders have available to preserve the project agreement structure, and to gain contractual privity with a project counterparty, is a direct agreement. The direct agreement, which is often referred to as a 'Consent' in US-based project financings, is a financing document between the lenders (acting through the collateral agent, who is appointed to enforce the lenders' security interest at their direction), borrower and the project counterparty. It is often considered the most important element of any project financing, particularly with respect to the most significant project agreements. As with credit agreement provisions applicable to project agreements, lenders and the borrower will negotiate the universe of counterparties from whom direct agreements will be required. Given the importance of direct agreements in ensuring that project agreements remain in force and the security interest granted in them remains valid, lenders will at the very least require them from the standard material project counterparties.

As a primary matter, direct agreements are a consent to the collateral assignment of the project agreement. Under the terms of the direct agreement, the project counterparty is consenting to the security interest in the borrower's rights to the project agreement that the borrower has granted to the lenders under the security agreement (or other collateral instrument). Even with respect to project agreements that by their terms expressly permit collateral assignment, lenders will request a direct agreement that includes the express consent to assignment. To that end, they are a collateral document and will benefit from the provisions of the credit agreement as such.

In addition to consenting to the grant of the security interest, the direct agreement also provides the lender with certain rights in respect of the project agreement vis-à-vis the borrower and the project counterparty. A direct agreement will often require the counterparty to concurrently deliver to the lenders copies of notices sent to the borrower. Additionally, a standard direct agreement will grant lenders the right to cure any breach under the project agreement by the borrower. Cure rights are essential in any direct agreement because they ensure that the lenders do not lose the benefit of the underlying project agreement without the opportunity to fix the problems. Such cure rights are often subject to agreed time periods – note that the lenders will usually have a shorter time to cure defaults arising from the borrower's failure to make a payment owed under the project contract than to cure those arising for other reasons. The cure rights in a direct agreement are often heavily negotiated

with each project counterparty, with a counterparty typically taking the view that it has already negotiated appropriate cure periods with the borrower. To avoid some of this negotiation, a seasoned and sophisticated borrower will often look to negotiate a form of direct agreement as part of the negotiation of the underlying project agreement. This is the time when a borrower has the most leverage over its counterparty and, assuming it understands the needs of its lenders, can make the negotiation of the direct agreement far smoother.

Further, as with the covenants applicable to the borrower in the credit agreement, in the direct agreement, the counterparty itself will be asked to agree to refrain from terminating, assigning or materially amending the applicable project agreement without lender consent. This way, the lenders have recourse directly against the counterparty, since the corresponding credit agreement covenant will only be enforceable with respect to the borrower. This provision is often resisted by project counterparties, particularly if a form of direct agreement has not been pre-negotiated. As part of the give and take of the negotiation, lenders will often live without the portion of the provision preventing the counterparty from amending the project agreement, and will rely on its covenants on the borrower in the credit agreement.

Under a direct agreement, lenders will also seek to receive the project counterparty's pre-agreed recognition of lender enforcement rights. Under the step-in rights and substitute owner provisions, lenders (or their agent or other nominees) are granted the right to temporarily or permanently step into, and perform, the borrower's rights and obligations under the project agreement. The substitute owner provision will also, in the event of a foreclosure by the lenders, permit the applicable purchaser in a resulting foreclosure sale to be recognised as the successor to the borrower and perform under the contract. These provisions are typically highly negotiated as project counterparties seek to mitigate the risk of unqualified substitute owners while lenders seek to preserve a broader market of potential buyers in a foreclosure. In consideration for the recognition of a substitute owner (other than the collateral agent as an interim owner), the project counterparty may seek specific parameters applicable to the proposed substitute owner. For example, the project counterparty may request certain creditworthiness and expertise standards, ensuring that the ultimate substitute owner is reasonably capable of operating the project and meeting the obligations under the project agreement. Additionally, as a condition to recognising a substitute owner or permitting lender step-in rights, the project counterparty will frequently negotiate the direct agreement to require the lenders to cure any existing borrower defaults under the project agreement.

Similarly, if the agreement is terminated as a result of the borrower's insolvency, the direct agreement's replacement provision will require the counterparty to enter into a new project agreement with the collateral agent (or a nominee thereof). This provision will customarily require that the replacement agreement be on substantially the same terms as the existing project agreement. The object of this provision and the provisions related to substitute owners is to preserve the value of the project as a going concern in the event of foreclosure.

The direct agreement will also require the project counterparty to deposit any payments under the direct agreement into the secured accounts established pursuant to depositary or accounts agreement for the financing.

Replicating provisions found in the credit agreement, the direct agreement also contains representations and warranties from the applicable project counterparty for the lenders' benefit as to the counterparty's status and the status of the project agreements—as discussed above, the borrower can usually only make qualified representations as to the counterparty's status and

performance. Further, the direct agreement will occasionally contain a covenant requiring the counterparty to continue to perform its obligations under the project agreement, although this covenant is often heavily resisted by the counterparty on the basis that it overrides many of the other negotiated provisions of the direct agreement. Finally, lenders may also request that the project counterparty's counsel deliver a legal opinion as to the enforceability of the direct agreement against the counterparty. This requirement is often a point of contention, as project counterparties resist the incurrence of additional expense (though lenders may accept an in-house counsel's legal opinion to assuage this concern) and liability attendant with delivering a legal opinion.

While the requested elements of direct agreements are standard, and direct agreements are often treated as secondary documents in the course of financing negotiations, their importance cannot be overstated. Without a direct agreement, lenders would not have an agreement with the project counterparties that they can enforce, and thus are exposed to potential significant risk that the project agreement structure would not remain in place following foreclosure or default by the borrower. Direct agreements are often heavily negotiated, and some counterparties, particularly those that are experienced in project finance and knowledgeable as to what has been accepted in other transactions, have great success in pushing back against the standard provisions in a direct agreement. As noted above, to ensure a smooth and efficient execution of a project financing, a borrower is well advised to pre-negotiate the requirements of a direct agreement with its project counterparties.

V CONCLUSION

With the value of the asset, and therefore the lender's security package, being derived substantially from the successful construction and ongoing operation of the project, project agreements and counterparties – not to mention the borrower's and lenders' relationship thereto – are the key elements to any project financing. To fully understand and mitigate the risks of, and to, the project agreement structure, it is imperative that lenders thoroughly carry out due diligence on the project agreements, negotiate key credit agreement provisions (in particular conditions precedent and covenants related thereto) and enter into comprehensive direct agreements. Without this holistic approach, lenders face considerable risk of degradation in asset value during the term of the loan and in the event of any foreclosure or subsequent sale.

PROJECT CASH, TYPICAL ACCOUNT STRUCTURES AND PROJECT CASH WATERFALLS

*Brian A Bradshaw*¹

I OVERVIEW

As discussed elsewhere in this work, the basic project finance structure provides limited or no recourse for the lenders following completion of construction. Given the limited nature of revenue sources for a typical project financing (e.g., a sole power purchase agreement or limited liquefied natural gas sales agreements), the control of the cash generated from these sales is paramount for ensuring the lenders are repaid. As long as the lenders can establish a reasonable means of controlling the flow of funds through the project company, they will typically agree to take operating risk from the project. The means of obtaining this control is an agreement among the borrower, the administrative agent for the lenders and the collateral agent (if different than the agent). The basic structure of a collateral and accounts agreement (accounts agreement) is to establish a series of bank accounts under the control of the collateral agent that will provide a road map for exactly how funds will be received, allocated for the project, and ultimately distributed to the equity owners. These accounts are established in a cascading order of priority (i.e., a waterfall structure) so that when the first account is full (or not applicable), the account below is filled until finally the money will be distributed to the borrower from the lowest account level in the waterfall.

II ESTABLISHMENT OF ACCOUNTS

The backbone of an accounts agreement is the accounts themselves. There is significant variation in the level of complexity of an accounts agreement depending upon the nature of the underlying transaction. At the extreme end of the continuum of complexity is an accounts agreement that must contemplate more than one borrower (e.g., an aggregation structure), onshore and offshore collateral accounts that will need to address more than one currency (hard currency-denominated accounts and local currency accounts), multiple jurisdictions for the accounts themselves, a complex tax structure and finally, the relevant construction and commercial accounts. Depending on the underlying commercial transaction, these structures can be simplified significantly. An international project financing that has lenders in a major financial centre (e.g., New York or London) and a borrower based in a third jurisdiction (e.g., in the developing world) will typically have, at a minimum, the following accounts:

¹ Brian A Bradshaw is a partner at Sidley Austin LLP.

i Revenue account

The revenue account is designed to receive all revenue generated by the project, including from the sale of goods, performance of services, sale of obsolete equipment, etc. Any activity that generates revenue for the project will be deposited into the revenue account. Depending on the nature of the transaction, there may be an offshore and onshore revenue account. If revenue is generated in local currency, it will be deposited into a local revenue account (onshore local currency). Typically, lenders prefer accounts that receive money in local currency to convert these funds to hard currency as soon as possible and transfer them to an offshore revenue account (e.g., dollar-based revenue account in New York).

ii Construction account

The construction account is designed to distribute all monies related to the construction of the project. If there is a split engineering, procurement and construction contract (offshore and onshore) or if the project itself has onshore and offshore accounts, there will be a hard currency construction account and a local currency construction account. Money will typically be deposited by the borrower and the lenders in the offshore construction account. For amounts that are payable in hard currency, the borrower will instruct payments to be made to the contractors of the project through the offshore account. To the extent that amounts are payable in local currency, amounts will be converted into local currency and deposited into the onshore construction account for payment to be made to the onshore contractors. For international project financing, it is very typical for some costs to be denominated in local currency and other costs to be denominated in hard currency.

iii Operating account

This account is designed to cover the ongoing expenses of the project from the amounts initially paid into the revenue account. This is a general account for the payment of operation and maintenance expenses, together with general ongoing expense (e.g., taxes, payroll, etc.). Lenders typically require annual and rolling three- or five-year budgets. The amounts payable from these operating accounts are then compared to the budgeted amount to determine the overall status of the project. Similar to the payment of construction expenses, there are often onshore and offshore expenses that necessitate onshore and offshore operating accounts.

iv Maintenance reserve account

A maintenance reserve account is designed to allow the project to slowly accumulate funds for major maintenance or a major overhaul of the equipment. The rate at which this account is filled is based upon the recommended maintenance cycle from the manufacturer of the equipment. For example, if every five years major maintenance were required for a major piece of equipment, the account would require 20 per cent of the estimated costs to be deposited each year so that 100 per cent of the costs would be available in the five-year cycle. Similar to the construction account and operating account, this expense-related account will typically have an onshore and offshore account structure. It should be noted that not all project financings have a maintenance reserve account. For example, it is typical for the borrower in a power project to enter into a long-term service agreement with the manufacturer of the turbines that includes major maintenance imbedded in the annual fee (i.e., the reserve account is not required because the payment scheduled is levelised to take into account periodic major maintenance).

v Lost proceeds account

Given the limited recourse available to the lenders in a project financing, lenders require a robust insurance package to be put in place to address catastrophic losses. If an event of force majeure occurs that results in catastrophic loss to a significant portion of the project, the insurance proceeds received under the insurance policies will be deposited in the lost proceeds account. If the project is not capable of being rebuilt or repaired to permit the project to operate at or near its prior level of operations, the insurance proceeds will be used to prepay all or a portion of the loan. If the project is capable of being rebuilt or repaired (following confirmation by the independent engineer), the insurance proceeds will be used to rebuild the project. The credit agreement will typically provide detailed provisions regarding the ability of the borrower to use insurance proceeds.

vi Debt service reserve account

The debt service reserve account is not an operating account (i.e., it is not used on a regular basis). The account is designed to be filled (often with initial borrowings) and maintained as a reserve. Ideally, the account is never used by the lenders. Because of this ‘dead money’ problem, borrowers will often seek to post a letter of credit or other security in lieu of maintaining several months of payments in a debt service reserve account.

vii Distribution account

This account is designed to let the borrower distribute funds to itself following satisfaction of all of the requirements in the credit agreement and the accounts agreement. Typically, amounts can only be distributed on a periodic basis from this account (e.g., every three months). If an event of default occurs (regardless of whether it is a technical default such as a failure to maintain a particular coverage ratio or an actual payment default of amounts due), this account is locked and no distributions may be made until the event of default is cured. The credit agreement will often have a provision that states that if amounts have been held in the distribution account in excess of a specified period (e.g., 12 months) because the account has been locked owing to an event of default that remains uncured, the amounts in that account will be used to prepay the loan.

viii Other

In any given transaction, there may be a need for additional reserve accounts (e.g., specific maintenance reserve accounts related to specific equipment or a tax reserve account) or additional operational accounts (e.g., revenue is received from more than one source or payments must be made by more than one borrower or guarantor). Separately, if additional loans are being made based upon distinct collateral (e.g., VAT loans), a parallel accounts structure will need to be established to synchronise with the traditional collateral accounts structure.

III PRIORITY

The fundamental reason for the account structure is to provide the secured creditors with accounts over which they have a valid lien that is first in priority (in comparison to other potential creditors). In all jurisdictions, the type of collateral in which a lender is taking a security interest will dictate the mechanism for perfecting the security interest. For example,

in the case of real estate (immovable assets), the secured parties are required to file in a local real estate registry to put all third parties on notice of the encumbrance upon the real property. For other collateral, the filing of a financing statement will be sufficient as long as it describes the collateral that is being encumbered by the secured parties and is filed in the appropriate commercial registry. While it will depend in large part upon the requirements of local law, there is some level of commonality in all jurisdictions. With respect to the collateral accounts, because it is difficult to put third parties on notice of the encumbrance on the accounts, the most common way to have a valid encumbrance over a deposit account is to maintain 'control' over that account and be able to direct the flow of funds in that account.

The concept of 'control' can vary from jurisdiction to jurisdiction, but the general rule is that the borrower can place funds in deposit accounts that are opened in the bank of the collateral agent, which allows the collateral agent to exert control over those accounts. Thus, for an international project financing, there would be two collateral agents (onshore and offshore). Each of these banks would have accounts established by the borrower with them to provide sufficient control for the collateral agent. As an alternative, the borrower, a third-party bank and the collateral agent may enter into some form of control agreement that would allow the collateral agent to make elections and direct the flow of funds with the third-party account (i.e., a third bank would agree to receive instructions from the collateral agent regarding the transfer of funds from the controlled accounts). The final alternative would be to have the collateral agent serve as the actual owner of the account in lieu of the borrower, but this often presents logistical problems if the account is used for day-to-day operations by the borrower.

Once the basic structure of the collateral accounts is established, the specific treatment of each account is further developed in the accounts agreement (e.g., these accounts may be segregated). For example, one tax complexity that would need to be addressed in some jurisdictions is the treatment of value added tax (VAT) loans (essentially credits issued by the government that can be financed as part of an 'equity' package) that are part of the overall transaction, but receive different treatment with respect to the collateral. Certain lenders may be a secured party in all of the collateral accounts established under the accounts structure, while other lenders only have rights to specifically identified accounts. In the scenario of a VAT lender, the VAT lender may only have priority rights to the VAT collateral accounts and may have a secondary lien on the overall project account. The inter-creditor agreement will establish the relationship between the secured parties, which will include the lenders and certain hedge providers (e.g., interest rate hedges or commodity hedges). The accounts agreement will merely reflect the commercial understanding reached by the various secured parties under the inter-creditor agreement regarding priority to the collateral accounts.

In addition to establishing the various collateral accounts and granting a first priority lien in favour of the collateral agent for the benefit of the secured parties, the borrower may grant secondary liens to certain secured parties to the extent permitted under the accounts agreement. Other than as specifically stipulated in the accounts agreement, the borrower agrees not to allow any additional liens or encumbrances to be placed on any of the collateral accounts. The net result is a first priority lien for the secured lenders of collateral accounts that are under the control of the bank.

IV DEPOSITS

The collateral accounts agreement establishes the mechanism to ensure that all sources of income flow through the collateral account waterfall. To capture all revenue generated by the project, the collateral account structure will require the borrower to deposit all hard currency and local currency into the applicable revenue accounts. It will also prohibit the borrower from opening any new bank accounts or from depositing money in any account outside of the control accounts. In this way, all revenue derived from the project is subject to the waterfall and the repayment of the loan, and there is no 'leakage' of funds.

The accounts agreement also requires all debt and equity funding to be deposited in the collateral account structure. This applies to cash calls made by the equity owners of the project as well as borrowings under the credit agreement. As a result, all funds contributed as equity or debt in connection with the construction of the project are subject to the collateral account structure. One common exception to the obligation to deposit all capital requirements for the project is the recognition received for the benefit of the borrower for expenditures in the development of the project (e.g., obtaining permits or land rights) made prior to the establishment of the collateral accounts. The borrower will get credit for these prior expenditures as part of its mandatory equity contribution, which allows the borrower to maintain the required debt-to-equity ratio established under the credit agreement or to make any required equity contributions prior to making any borrowings under the credit agreement (some credit agreements require all equity contributions to be made prior to any borrowings).

V WITHDRAWALS

Equally important for establishing the overall structure of the collateral accounts is to create the framework for how monies are transferred or withdrawn from the accounts. Once money has been deposited into the collateral account structure, the accounts structure must then delineate how the monies will be transferred, including to a lower priority account (i.e., lower in the waterfall), as payment of an expense, as a reserve or as a distribution to the equity holders of the project. To make a withdrawal, the borrower must provide a certificate to the collateral agent setting forth the mechanism under which the borrower would like to make a transfer from one account to another. This applies to transfers through the entire waterfall structure that are eventually subject to being distributed out to the equity owners. The ability of the borrower to make transfers is greatly curtailed during an event of default. The lenders will typically provide written instructions to the collateral agent regarding how funds are to be treated in the collateral accounts. If the amounts on deposit are insufficient to make a required payment, the borrower will always remain responsible for any deficiencies. Failure to have sufficient funds available to make a payment under the loan does not relieve the payment obligation. If the monies available are insufficient (e.g., there is a default by the oftaker), the only way the lenders may be able to recover the loaned amounts is through a forced sale (foreclosure).

For each account, there is a specific waterfall that is established under the collateral accounts agreement. Not all accounts necessarily flow from one to another (i.e., there is not one waterfall, but rather a waterfall for each account that depends on the nature of the account). For example, a revenue account will never flow down to a loss proceeds account (insurance proceeds) because they are addressing different events. A typical revenue account priority structure is set forth below. The structure for both an offshore revenue account and

an onshore revenue account are similar (if the mirror image in many ways) as funds are required to flow between the two accounts. This example is merely intended as a representative example of how the structure works with both an onshore account and an offshore account. The actual priority and specific accounts are always negotiated. In this example, revenue will be deposited into the onshore revenue account in local currency, and funds will be paid out as follows: first – to all fees, cost and expenses payable to the administrative agent and the collateral agents; second – to the hard currency revenue account in the amount necessary to cover any shortfalls under the offshore revenue account waterfall (i.e., the onshore waterfall will be used to remedy any offshore shortfalls); third – to the local currency operation and maintenance account for payments in the next 30 days (onshore); and fourth – to the hard currency revenue account (the remaining amount in local currency that will be converted).

Once revenue in local currency has either been allocated for onshore payments of maintenance or converted and moved offshore to the hard currency revenue account, the accounts agreement establishes a separate waterfall for all hard currency revenue accounts. For revenue deposited into the offshore revenue account the priority of payment in the current example would be as follows: first – to all fees, cost and expenses payable to the administrative agent and the collateral agents; second – to the local currency revenue account in the amount necessary to cover any shortfalls under the onshore revenue account waterfall (i.e., the offshore waterfall will be used to remedy any onshore shortfalls); third – to the hard currency operation and maintenance account for payments in the next 30 days (offshore); fourth – to the debt service reserve account; fifth – to the major maintenance reserve accounts; sixth – to the offshore construction account (in the case of a phased construction with parts of the facility reaching commercial operations while other phases of the project remain under construction); and seventh – to the hard currency distribution reserve account (for distribution to the equity owners of borrower).

Once all the conditions are satisfied with respect to any given account, the priority system of the next account will apply to allow funds to flow to the final account in the waterfall. All conditions must be satisfied for the funds to be moved to the next account.

VI PERMITTED INVESTMENTS

The accounts agreement will set forth the permitted investments for amounts on deposit. They are temporary investments that are normally low interest bearing accounts that have virtually no risk associated with the investment. Owing to the nature of the accounts, which are only designed to hold funds for a limited amount of time, and the risk tolerance for the investments in those accounts, the net result is an extremely conservative investment profile for the funds held in the accounts. There is no obligation for any of the agents to invest those funds, but there is the ability to do so if it makes sense under the circumstances.

TYPICAL SECURITY ARRANGEMENTS FOR A SINGLE SOURCE PROJECT FINANCING

Borja Contreras and Ignacio Álvarez¹

I INTRODUCTION

A comprehensive security package is a common feature of most (if not all) project finance transactions. Although the specific scope of the security package varies depending on certain circumstances (e.g., jurisdiction or type of project), lenders will usually require security interests over all or most of the project's assets and rights, as well as over the shares in the project company and other forms of equity, to feel comfortable with a non-recourse or limited recourse, highly leveraged financing, as project financings usually are.

The aim of this chapter is to cover the following matters regarding typical security arrangements for a single source project financing:

- a* the role and main purposes of the security interest package;
- b* the scope and typical security interests that usually comprise the security package; and
- c* a brief overview of the following matters concerning security interests: governing law, formalities and publicity, documentation, enforcement and foreclosure, and the negative pledge covenant.

Personal guarantees and other forms of support by or recourse to the sponsor, such as completion or cost-overflow guarantees are not covered in this chapter.

II ROLE AND MAIN PURPOSES OF SECURITY INTERESTS

i Foreclosure and use of the proceeds to repay the loan

Security interests are commonly regarded as a safeguard for the lenders to be repaid. That is, if the borrower is unable to serve the debt or is otherwise in default, the lenders may, by foreclosing on the security interests, sell the assets subject to security and use the proceeds to repay the financing.

However, while this is indeed a purpose of the security interests (and certainly an important one, at least hypothetically), it must be noted that, leaving aside jurisdiction-specific restrictions and limitations to foreclosure of security interests that apply generally or to the resulting sale and transfer of the pledged assets or rights,² foreclosure of security interests in project financings is rarely an expected or desired outcome for lenders, as the proceeds of the foreclosure are unlikely to suffice to repay the loan in a distressed situation, especially

1 Borja Contreras and Ignacio Álvarez are senior associates at Uría Menéndez Abogados, SLP.

2 For example, the transfer of certain administrative concessions, authorisations, licences or permits may require prior administrative consent in some jurisdictions.

during the construction phase or early stages of an operation. In this regard, the market for a project in the context of foreclosure proceedings (which in many cases will be the result of structural problems different to mismanagement, such as regulatory changes or problems with key project participants such as the constructor) will usually be quite shallow. It will, therefore, normally be difficult to have a fairly ascertainable value and to maximise the price in a foreclosure sale.

Furthermore, normally only a foreclosure that allows a third party to acquire, directly or indirectly, control over all the assets and project contracts required to complete the construction or operate the project (or both) will make economic sense for potential third-party bidders but standalone project assets or rights will rarely have much value.

ii Protection against other creditors

Even if the ‘aggressive’ use of security interests described in Section II(i) is of limited value to lenders, security interests provide them with other benefits that should not be disregarded. Most importantly, secured lenders will normally rank ahead of other creditors with respect to the assets taken as security both in a pre-insolvency scenario (attachments resulting from enforcements by unsecured creditors will usually rank junior to the lenders’ lien) and in an insolvency scenario (in cases of a sale or liquidation in the course of insolvency proceedings, secured lenders will normally be repaid first with the proceeds of any asset charged in their favour).

iii Other advantages in cases of insolvency

Depending on the governing insolvency regulations, security interests may provide different advantages to the secured creditors, such as protection from the effects of composition agreements or other similar arrangements that can be crammed down on dissenting creditors, or limitations on the stay of foreclosure proceedings during the insolvency proceedings.

iv Preservation of the project assets

Security interests also serve the purpose of preserving the project’s assets since they constitute a serious obstacle for the assets to be disposed of without the secured creditors’ consent. The facility agreement or other finance documents will typically include covenants aimed at preventing any such disposal, but security interests provide an enhanced protection in this respect since, due to their *in rem* nature, they will normally remain attached to the asset even if the borrower disposes of it in favour of a third party. Consequently, no reasonable and diligent third party will acquire a pledged asset to which the lenders have recourse, unless the outstanding senior debt is discounted from the price or repaid at the time of the acquisition.

v Control over the project assets

Either by including covenants to that effect in the security documents or by operation of law, security interests grant certain control rights to the secured creditors to ensure, *inter alia*, that the validity and enforceability of the security interest is not impaired, to preserve the value of the asset taken as security and, ultimately, to have control over the assets (without taking ownership).

In this regard, in some English-law based jurisdictions, secured creditors holding a floating charge over all or substantially all of the project company’s assets that qualify as such under the applicable law may appoint a receiver that can take over the collateral and thus

manage the business and operate the project in the best interest of the secured creditors with a view to repaying the amounts owed to them or maximising their potential recovery in a future sale (or both).

In jurisdictions where such a possibility is not available, control can be sought by other means such as:

- a* vesting secured creditors who have taken security over the shares in the project company with the shareholders' voting and political rights in the event of enforcement; or
- b* issuing a golden share in the project company to the lenders that would entitle them to appoint directors in the event of a default.

Control over the project and the project company should nonetheless be closely assessed by lenders in view of the law governing the insolvency of the project company and the risk of shadow directorship thereunder. In cases of insolvency in some jurisdictions, lenders who are considered to have been managing the project company in practice even if they formally hold no directorship or right to appoint any directors or equivalent officers (that is, the lenders are considered to have acted as shadow directors) could have their claims subordinated or face liability in similar terms to the actual directors of the project company.

III DESCRIPTION OF THE SECURITY PACKAGE

i Scope

In line with typical market practice, the security package to be put in place in connection with the relevant project financing should ensure that it serves the roles and purposes set out in Section II to the maximum extent possible.

As mentioned above, project financing lenders usually require a security package that covers all the assets and rights of the project company (and therefore all potential sources of income for the project), or at least those that are necessary for the construction, start-up, commissioning and operation of the project. Security granted by the sponsor is usually limited to the shares in the project company and other forms of equity contributed to the company, such as shareholder loans.

However, the above principle is subject to different limitations, such as the ones described below.

Legal limitations on the type of security interests available

In some jurisdictions, it is not possible to take security over assets of a certain nature or type (e.g., administrative concessions) or over future assets. If security over future assets is not available, lenders may require promissory security to be granted over future assets, which is a covenant to grant security over any new asset or right such as the rights under new project contracts.

In particular, floating liens or charges that operate as a blanket lien over all the assets of a borrower (or, in the case of a floating charge, a charge that only crystallises as a fixed charge over specific assets upon the occurrence of certain trigger events such as the commencement of liquidation proceedings or the enforcement of the relevant security) are normally only available in English-law based jurisdictions.

Furthermore, the secured debt or obligations may also be subject to limitations in certain jurisdictions. For instance, in some jurisdictions it is not possible to create security interests over assets to secure debt or obligations that do not exist at the time the security interests are created or that may fluctuate (e.g., revolving credit facilities).

Contractual limitations to the creation of security

Project contracts and agreements conferring rights to use plots of land may contain limitations on the creation of security interests, especially if the foreclosure of such security may result in the assignment of the relevant contract or agreement (as opposed to a pledge over pure credit rights that, if foreclosed, will only result in the relevant counterparty making any payments under the relevant contract directly to the lenders instead of to the project company). However, lenders will typically assess this risk in their legal due diligence and require that these contracts be amended appropriately or will deal with the matter during the negotiation of direct agreements with the counterparties under such project contracts.

Costs and taxes

In some jurisdictions, the creation and perfection of security interests may trigger significant costs such as notarial and registration fees and taxes such as stamp duty. In such cases, lenders may be willing to relinquish having security over certain assets (e.g., those that trigger stamp duty) if they are comfortable with the remaining security package. Instead, they may accept a promissory security over such assets so that these security interests are created upon the occurrence of certain trigger events to be agreed among the parties (typically, an event of default or ratios falling below or above, as applicable, certain thresholds). However, to the extent that the subsequent creation of the actual security interest pursuant to the promissory security arrangement requires any type of collaboration by the borrower (even if it has undertaken to provide such collaboration), or if it otherwise requires a lengthy process, the effectiveness of promissory security is very limited by comparison to proper security. As explained, triggers are usually related to distressed or troublesome situations and it is unlikely that the borrower will be willing to grant additional security and may try to avoid doing so by all legal means such as through injunctions or filing for insolvency.

ii Typical security package in a project financing

For the purposes of describing the typical security package in a project financing, we have assumed a simple structure where the sponsor directly owns the shares in the project company, which in turn has no subsidiaries.

If the project company (i.e., the borrower) has subsidiaries (e.g., a structure where the borrower is a holding company that has operating subsidiaries to which it on-lends the proceeds of the project financing), lenders will normally require those subsidiaries not only to accede to the financing as guarantors if they are not borrowers, but also grant security over all (or almost all) their assets in the same terms as described in Section III.ii (Security over project assets). The borrower would be required to grant security over the shares in any such subsidiaries and all of its remaining assets (if any).

In the event that there are different intermediate holding companies between the sponsor and the project company, lenders may take security over the shares in such holding companies or not depending on the specific circumstances. However, if any such intermediate holding companies directly or indirectly own projects different to the one being financed, security will rarely be taken over the shares in such companies as it would defeat the purpose

of a non or limited recourse financing. In some cases, intermediate holding companies may be included in the structure for the purposes of, *inter alia*, making the lenders comfortable with their security package. There are jurisdictions where the creation or – more typically – foreclosure on the pledge over the shares in the project company may be burdensome and troublesome, whether as a result of foreclosure regulations and limitations applying generally or because of the specific circumstances of the project (e.g., change of control over the project company resulting from the foreclosure requires the administration's prior consent) and therefore, lenders may try to circumvent such limitations by taking security over an intermediate holding company incorporated in a lender-friendly jurisdiction so that they can swiftly take control (indirectly) over the project or sell it to apply the proceeds to repay their debt (or both).

Security over the project assets

As explained above, lenders will typically require the project company to grant security over all of its assets and rights.

Blanket or floating liens or charges

As explained above, in some jurisdictions it is possible to have a floating or blanket lien or charge over all (or substantially all) the assets of the project company. While there are differences between the different figures available in different jurisdictions, ultimately these figures enable lenders to take some sort of security over all the assets owned by the project company from time to time (that is, not only the assets owned at the time of the creation of the security interest, but also any assets that the project may own in the future).

Security over real estate assets held by the project company

To the extent that the project company owns any real estate assets (e.g., the plots of land where the project is located), lenders may want to take a lien over them. While liens, such as mortgages, over real property are available in most jurisdictions, such security interests usually lead to significant costs (e.g. stamp duty) and therefore, as explained in Section III.i (Costs and taxes), lenders may be willing to relinquish such security depending on the remaining security package and the nature of the project. Furthermore, project companies usually have lease agreements or other types of right of use over the relevant plots of land rather than acquiring them to reduce costs and minimise the risk assumed should financing for the project not be closed.

Security over amounts standing to the credit of certain bank accounts

Lenders will take security over the credit rights arising from the bank accounts opened by the project company (see chapter 10 'Project Cash, Typical Account Structure and Project Cash Waterfalls') or otherwise over the funds deposited therein. As an exception, the project company will usually successfully request that the bank account where amounts that can be distributed to the sponsor or shareholders are deposited not be pledged in favour of the lenders.

Security over intangible assets

Although projects that are financed under project financing structures are typically not IP-driven, if there are any intangible assets or rights that are necessary to operate the project or are otherwise relevant to it, such as any intellectual property rights or technology licences, lenders will want to take security over them.

Security over equipment, machinery, vehicles, spare parts and other moveable assets

To the extent that these have a significant value or are necessary for the construction or operation of the project, lenders may want to take security over movable assets. In some cases, such as spare parts, the project company will want to ensure that the security created does not restrict the use and eventual disposal of the relevant movable assets or otherwise impair its operations.

Security over concessions, permits, licences, authorisations, or other rights vis-à-vis the administration

This might be a key element of the security package structure in cases where the relevant project is based on a concession or on projects, such as energy projects based on feed-in tariffs, where the project is entitled to receive all or part of its income from the administration (or any regulator, the system, market operator or other similar entity) according to the applicable laws. On the other hand, lenders will not be so interested in taking security over minor standard permits such as works licences. Local law will typically play a key role in the taking of security over administrative concessions, permits, licences and authorisations, since it may not be possible to take such security at all or the foreclosure thereon may be seriously impaired because of having to request some sort of consent to transfer the permits.

Security over project contracts

Project contracts (or the credit rights arising thereunder), such as the construction and the operation and maintenance agreements, are key for the construction, start-up and operation of the project. In some cases, such as projects based on one or more offtake agreements, they may also be the main source of cash flows. Consequently, lenders will seek to take security over these agreements (or have a conditioned assignment thereof) or over the credit rights arising thereunder (e.g., in the case of construction agreements, payment of liquidated damages or penalties in the event of delays), or both. If the enforcement or foreclosure of such security can lead to an assignment of the relevant contract, lenders will have to ensure that it is possible to do so according to the relevant contract or ensure that its properly amended prior to entering into the project finance documents or as a condition precedent to the first utilisation. Counterparties to project contracts may, however, refuse to accept the assignment of their contract to the lenders or a third party in the context of foreclosure proceedings without their prior consent.

Security over insurance policies

Insurance policies (or the credit rights arising thereunder) may also be pledged in favour of the lenders. However, lenders may also feel comfortable if they are included as direct beneficiaries of such insurance policies.

Security over the shares in the project company and shareholders' subordinated debt

Given that under a project financing structure lenders should have no or limited recourse to the sponsor, the security granted by the sponsor is typically limited to the shares in the project company, the shareholder loans granted to the project company and, if applicable, other forms of equity (in the broad sense) contributed to the project company (or the securities representing title over such equity or ownership over the project company).

Security over shares in the project company can be especially valuable for lenders where the relevant jurisdiction does not permit the lenders to attain a comprehensive security package. Similarly, it is also a useful tool in jurisdictions where a blanket or floating lien or charge over all the assets of the project company is not available and therefore it is not possible to, in an enforcement or foreclosure scenario, take control over or sell to a third party (indirectly) the project as a whole. On the other hand, acquiring the shares in a project company means taking on board all the liabilities, obligations and responsibilities of that project company, which the lenders or third-party acquirers may want to avoid.

In some jurisdictions, it may not be possible for foreign lenders to take security over the shares in a local company, particularly in the case of projects in the public domain or in strategically important industries. This restriction may be circumvented in these circumstances by making a local bank take the security over such shares on trust for the lenders.

Additionally to the foreclosure and sale of the shares in the project company, this type of security interest may allow the lenders (1) to exercise the voting and other similar rights attached to the relevant shares; (2) to gain additional control with respect to any share capital increases of the project company; and (3) to include additional restrictions to the payment of dividends or any other distributions that are not specifically permitted in the finance documents.

If the sponsor or shareholder owning the shares in the project company is not a guarantor under the project financing, lenders would typically want it to waive or forgive any receivables that may be generated in its favour as a result of a foreclosure. The rationale being that it would be paying a debt that it does not owe itself and thus it would normally be entitled to be reimbursed by the project company. If such receivables are not waived or forgiven, the value of the shares in the project company would suffer significantly as the company would be acquired with a debt that is owed to its former shareholder in the same amount as the price paid for the shares (or, if lower, the amount of the project finance debt that was repaid using the proceeds of the sale).

In the event that equity committed by the sponsor is contributed in the form of shareholders' loans, lenders will normally have to take security over it to ensure that all of the equity interests in the project are covered by the security package.

IV OTHER RELEVANT MATTERS RELATING TO SECURITY ARRANGEMENTS

i Governing law

While many jurisdictions provide a reasonable degree of freedom to choose the governing law to loan documentation, such flexibility is usually reduced when it comes to security interests (in particular, with respect to formalities for their valid creation, perfection and publicity). In line with the *lex loci rei sitae* doctrine, the consensus in most jurisdictions is that the

creation and perfection of security interests is governed by the law of the jurisdiction where the collateral is located. This principle will not create much debate when it comes to real property, but it might be trickier in the case of movable property or intangible assets.

Consequently, ultimately it is quite common for the law of the jurisdiction where the project is located to govern the creation and perfection of security interests even if the loan documents are subject to a different law. It is therefore crucial for lenders to ensure (typically by engaging local counsel) that they have a clear understanding of applicable local law in respect of security interests and, in particular, the differences between the types of security interests available (e.g., fixed and floating charges and liens, mortgages, pledges or assignment by way of security); the limitations on the scope of the security package; the formalities required for the valid creation and perfection of security interests; and the limitations and restrictions applicable to enforcement, foreclosure and other remedies available.

ii Formalities and publicity

The applicable law may impose different formalities to the creation and perfection of security interests or to their subsequent enforcement, which can also result in higher costs and taxes.

Those formalities will vary from jurisdiction to jurisdiction but can include requirements as to the type of document in which the security interests are formalised,³ the language of the documents,⁴ the registration of the security interests in public or private registries,⁵ or the transfer of the possession of the asset from the owner to the beneficiary of the security interest.

Security interests in most jurisdictions require some publicity to be valid and enforceable (especially in the event that the project company becomes insolvent), or to be effective against other creditors of the project company or other third parties (e.g., a purchaser of a collateral pledged in favour of the lenders).

The method to achieve publicity mainly depends on the nature of the collateral and the applicable jurisdiction, but there are two main forms: (1) transfer of possession of the collateral to the relevant secured creditor; or (2) registration with a public or private registry (which can actually be a way of achieving the transfer of possession as further described below).

How possession is transferred will depend on the nature of the collateral and may vary from an actual physical transfer of possession of the collateral to the secured creditors, to a more instrumental or fictitious type of transfer of possession, such as registering the security interest in a registry, serving notice of the creation of the security over a project contract to the counterparty thereunder, or simply executing a notarial deed in which the security is formalised.

3 For example, local law may require that security interests be documented in a deed or in a notarial document to be valid.

4 For example, documents may need to be drafted in or translated into the local language either for their registration or for enforcement purposes.

5 For example, local law may require mortgages over real property to be registered in a land or similar registry or security over shares in the project company to be recorded in the shareholders register.

iii Security documents

Depending on the jurisdiction, all or most security interests can be granted in an omnibus security agreement, but it is also customary to execute a security principles document that identifies the main terms and conditions applicable to each of the local security documents that must be formalised in the relevant jurisdictions by reason of language or local formalities (e.g., notarisation).

Security documents can vary significantly, but the contents will usually include, *inter alia*:

- a* regulation of the creation and perfection of the security;
- b* regulation and mechanics of the extension of the security to other assets (e.g., in the case of security over shares, its extension to any newly issued shares);
- c* regulation of the release and cancellation of the security interests whether as a result of the fulfilment of the secured obligations or in other situations such as a permitted disposal of the collateral;
- d* representations and warranties including, most importantly, those relating to title and ownership over the collateral and its main features or characteristics;
- e* covenants normally relating to the maintenance, use and preservation of the collateral;
- f* remedies, enforcement and foreclosure of the security interests;
- g* miscellaneous provisions; and
- h* governing law and jurisdiction.

Security documents tend to be highly technical due to the applicable formalities and therefore few commercial or business issues arise when negotiating them. In any event, lenders (and their counsel) will typically seek to ensure that (1) the security interest is validly created and perfected; (2) the documents procure that the validity and enforceability of the security cannot be impaired; and (3) enforcement and foreclosure can be as swift and smooth as possible. On the other hand, the project company will try to ensure that the security documentation does not impose further restrictions and limitations to its operations than those heavily negotiated in the loan documents.

iv Enforcement and foreclosure

The remedies available for secured creditors vary significantly from one jurisdiction to another. For instance, remedies in many jurisdictions are limited to foreclosure and sale of the collateral (typically in some sort of auction), while in others the range may be wider including the direct appropriation of the collateral by the secured creditors or the appointment of a receiver as further discussed in Section II.v.

Furthermore, foreclosure mechanics and restrictions also vary significantly from one jurisdiction to another. To assess the quality of their security package, lenders should not only be concerned about its scope, but also about the mechanics of foreclosure under the applicable law.

In particular, lenders should consider the following matters carefully:

- a* the application of compulsory grace or cure periods prior to foreclosure and limitations as to the right to foreclose (e.g., courts in some jurisdictions may be reluctant to uphold a foreclosure based on a technical or minor event of default);
- b* the availability of different foreclosure routes (e.g., in and out of court) and mechanics (e.g., private bilateral sale versus public auction);
- c* the obligations relating to the maximisation of the value of the collateral in its realisation;

- d* the impact that the insolvency of the project company may have on foreclosure (e.g., foreclosures may be stayed during all or part of the duration of insolvency proceedings);
- e* the limitations or restrictions on secured creditors participating in foreclosure auctions and credit bids (i.e., whether lenders can bid in their debt at foreclosure instead of doing so in cash);
- f* the expected costs arising from foreclosure; and
- g* the time frame applicable to foreclosure proceedings.

v Negative pledge

Project finance documentation will normally include, not only the obligation to grant in favour of the lenders the security interests discussed in this chapter, but also a negative pledge covenant preventing the project company from granting any type of security over its assets (subject to certain exceptions such as those arising by operation of law or certain baskets that may be negotiated among the parties on a case-by-case basis) to provide additional protection to secured lenders with respect to their ranking.

Although this mechanism provides the lenders with additional comfort that no other third party will inhibit their rights to repayment (especially in the cases where the facility agreement also provides for additional covenants that aim to secure the equal treatment of all the creditors such as *pari passu* and cross default), it is worth noting that this undertaking will not be binding upon third parties and will typically not prevent the generation of legal liens, encumbrances or charges by operation of law, or prejudice any legal privilege relating to priority of payments.

COMMON COLLATERAL FOR MULTI-SOURCE FINANCING

*David F Asmus and Adam Cowan*¹

I REASONS FOR AND CHALLENGES OF MULTI-SOURCE FINANCING

Multi-source financing, as used in this chapter, means financing furnished to a project from more than one source (loans from different types of lending institution (commercial banks, export credit agencies, multilateral institutions, bonds, pension fund investments, etc.), or multiple groups of lenders of the same type. The term is not intended to address traditional bank syndication, which presents some similar issues but not nearly the breadth of concerns presented by a multi-source project financing. Multi-source financings involve many challenges for a borrower but, at the same time, may provide significant benefits (politically, economically and from an operational perspective).

A project may obtain financing from multiple sources for a variety of reasons. These include, among others, the need for more debt than any one source is willing to finance, and the opportunity to obtain the political and economic benefits of export credit agency and multilateral financing, which may be particularly helpful in jurisdictions in which traditional lenders may not wish to venture, but may not provide 100 per cent of the required funding or may impose certain restrictions on where a project may source its equipment and materials. In addition, obtaining funding from multiple sources spreads the inherent risks of a project (both for the lenders and the project itself) through debt of different tenors, pricing and other characteristics. Furthermore, different types of funding may only be available at certain stages of a project (for example during the construction or operational phases), and there may be a need to obtain mezzanine debt to fill out the capital structure in the event of a gap between available senior debt and the amount of equity the project sponsors desire or are able to furnish.

In contrast to a basic financing arrangement with one lender, or multiple lenders in a syndicate with a single lead arranger and agent, a multi-source financing typically involves multiple groups or types of lenders, with their own separate financing agreements with the project, including their own separate funding mechanics, representations, covenants and events of default. To avoid a battle over the project collateral that each group desires to attach and a scramble to exercise remedies in the event of a default, which is not ultimately in the interests of any of the lenders (given that project cash flow is the primary source of debt service), the lender groups typically enter into a common collateral agreement. While these bear resemblance to lender inter-creditor or subordination agreements in non-project financings (and may go by that same name), they address a wider set of issues. In addition,

¹ David F Asmus is a partner and Adam Cowan is counsel at Sidley Austin LLP.

in contrast to a typical lender inter-creditor agreement, the borrower is generally a party to the common collateral agreement, in which it agrees to grant security for the benefit of all lenders. These common collateral agreements are the subject of the remainder of this chapter.

II SECURITY

One of the most important roles of a common collateral agreement is to provide a common security package for the benefit of all participating lenders. Instead of each lender group entering into its own separate set of security agreements (mortgages, pledges, assignments, security interests, etc.), the borrower (and often related parties holding project assets – such as shareholders in the project company, project marketing companies and the like), grant to a collateral agent or collateral trustee a single security package for the benefit of all lenders. This avoids conflicting terms of security, and ensures that the lenders have the benefit of a uniform security package (although note that the common collateral agreement may nevertheless provide that one group of lenders has priority over, or is subordinate to, another group, as discussed further below). It also substantially reduces the burden of financing on the project sponsors, who otherwise would be forced to negotiate security packages with multiple lender groups (and, potentially, obtain multiple consents to security arrangements from various counterparties, including the host government).

Common collateral agreements will provide for the perfection of the common security on behalf of all lenders, and will specify who bears responsibility for undertaking the required perfection and any associated costs. Collateral may not be varied or released without approval of the appropriate vote of the lenders (see further discussion below).

Typically, common collateral agreements will also provide for the execution of a single set of direct agreements with key project counterparties (the host government, the offtaker, the engineering, procurement and construction contractor, etc.) which benefit all lenders. It would be impractical to try to obtain multiple, different direct agreements from these counterparties for each lender group.

In short, common collateral agreements seek to replicate, to the extent possible, the security package that would be obtained by a single lender group, but for the benefit of all.

III PRIORITIES AND SUBORDINATION

The relative priority of each lender's debt, rights to security and rights to receive the proceeds of enforcement must be addressed, and the rights of senior versus subordinated lenders with respect to each must be enumerated. The most fundamental question is whether all secured loans are treated on a *pari passu* basis or some are senior to others (generally based upon commercial discussions among the borrower and lender groups and reflected in debt pricing). In the latter case, the common collateral agreement will specifically define the quantum of debt that is senior, with senior status often limited to the principal amount outstanding from time to time, not to exceed the original commitments, plus interest, fees and costs, and perhaps an additional commitment allowance, minus payments. The subordinated lenders will not want to be subordinate to an indefinite amount of debt that can be increased without their consent. Common collateral agreements also protect subordinate lenders by including provisions that require all lenders to approve any change in the financing that may impact the timing of their repayment.

The common collateral agreement will also specify whether repayment of the subordinate debt is to be deferred until all senior debt is repaid, or is subordinated only in a default or

bankruptcy scenario. In a default scenario, there will likely be a time limit on the suspension of payment of the subordinated debt following the default, unless the senior lenders have by that date accelerated the loans or taken other enforcement action. The subordinated lenders do not want to be forced into an indefinite suspension of payments by a minor default.

Subordinated debt payments will be limited to those owing in the ordinary course under the financing documents, without the right to receive voluntary prepayments in a non-default scenario. Separate provisions generally address prepayment of debt using the proceeds of enforcement of collateral, such as a sale of the collateral, and typical mandatory prepayment scenarios, such as receipt of property damage insurance proceeds that will not be used for rebuilding.

The common collateral agreement will typically cover the right of the senior lenders to be paid in full in a bankruptcy prior to any payment on the subordinated debt. Beyond this basic issue, common collateral agreements often include waivers by the subordinated lenders of various rights in a bankruptcy, such as any right to challenge the validity of the senior credit documents or the senior lenders' rights to collateral (this waiver may be reciprocal, by both the senior and subordinated lenders), and any right to seek court authority to lift the bankruptcy stay and exercise security rights. It may also expressly limit the right of the subordinated lenders to offer debtor-in-possession financing (i.e., financing to the debtor while under bankruptcy protection) to pre-agreed circumstances, or prohibit it entirely, as debtor-in-possession financing can have priority over the senior lenders' debt in some legal systems. The common collateral agreement may also include pre-approval by the subordinated lenders for debtor-in-possession financing by the senior lenders (including the subordination of the subordinated debt to such a financing), use of cash collateral by or with approval of the senior lenders, and similar consents. The senior lenders may seek to control the vote of the subordinated creditors on any plan of reorganisation for the debtor, though this is likely to be resisted. The subordinated lenders may seek to reserve any rights that they would have in a bankruptcy as unsecured creditors, apart from their subordinated lien rights, but the acceptability of such a carve-out from the limitations that would otherwise apply will depend upon what those unsecured creditor rights are under the particular legal system.

Whether occurring in a bankruptcy scenario or otherwise, payments improperly received by a subordinated lender to which the senior lenders are entitled under the terms of the common collateral agreement are deemed to be held in trust for the benefit of the senior lenders, and must be turned over to them.

IV GENERAL LENDER RIGHTS

Certain other questions of rights among the lenders must also be addressed by the common collateral agreement.

The common collateral agreement will specify any restrictions the groups impose on the ability of any group to exercise rights under its separate financing agreements. For example, can a group:

- a* Take additional collateral in which the other groups do not participate?
- b* Shorten the maturity of its loans?
- c* Amend or waive its positive and negative covenants for the borrower?
- d* Alter its events of default and default remedies?

The lender groups will additionally address how decisions are made on matters of common interest, particularly decisions regarding enforcement of their security. This may include whether to enforce the security in the first place and, if so, when to enforce and the proposed manner of such enforcement. Such a decision typically requires a vote of the lenders, with a pass mark threshold established in the common collateral agreement. Different pass marks may apply in different scenarios, and may require a specified approval level within each lending group, or among all lending groups as a whole, or both. Typically, in a bankruptcy scenario, any lending group may require that the collateral agent enforce the security. Upon a borrower payment default, a majority in interest (by commitment or debt outstanding) may be able to call for enforcement action. Enforcement action in the event of a covenant default may require a higher pass mark, as the lenders generally do not want to take enforcement actions if the project is still operating efficiently, if cash is still flowing and the borrower is satisfying its financial ratio tests. Where there is subordinate debt, it may not be permitted to seek an enforcement action, perhaps until some deferral period has passed and the matter has not yet been resolved. It is not unusual to see a 'step-down' mechanism where the lender approval threshold required to take enforcement action steps down or reduces, over time. The theory is that, if the breach is relatively minor, or the impact on lenders relatively insignificant (for example, only one lending group is affected), then although those lenders may ultimately have the right to trigger enforcement action, they will have to wait a considerable amount of time before they are entitled to exercise that right.

Less commercial matters are also addressed, such as the appointment and removal of the collateral agent and its release from liability for actions taken in the performance of its duties (other than willful misconduct, fraud, etc.). The common collateral agreement will require that any person acquiring an interest in one of the loans join as a party.

V ENFORCEMENT OF SECURITY

When directed by the pass mark decision of the lenders, the collateral agent is obligated to enforce the lenders' security under the various security instruments executed pursuant to the common collateral agreement. Proceeds of such enforcement will be applied by the collateral agent for the benefit of the various lender groups in accordance with the terms of their relative priorities under the common collateral agreement.

VI PROJECT SPONSORS AS LENDERS

A project financing is often undertaken by a project sponsor group of varying creditworthiness, and sponsors with stronger credit frequently find that they could borrow funds at a lower rate through alternative arrangements. To avoid suffering the cost of the more expensive project finance arrangement, these sponsors with stronger credit sometimes join the lender groups as co-lenders, essentially neutralising their cost of the financing by acting both as lenders that receive interest as well as borrowers that pay it.

Introducing a sponsor into the lender group generates certain challenges, particularly with respect to the decision-making mechanism used to undertake enforcement actions. If the sponsor share of funding is large enough, the sponsor could block actions adverse to the project. Even if the sponsor's share is not that large, it can certainly prove an impediment to

obtaining the necessary majority for approving such actions. As a result, common collateral arrangements will generally exclude the sponsor-lender from participating in certain types of decisions, enforcement actions being key among these.

Such limitations aside, sponsor lenders should have the same rights as other lenders, particularly to benefit from the common security package and to participate in decisions relating to the terms of the common security arrangements, changes in lender obligations or priorities, and any releases or waivers of security rights.

VII ADDITIONAL DEBT FOR EXPANSIONS AND MODIFICATIONS

Common collateral agreements are generally established to secure initial construction debt from specific lender groups. Projects are not static, however. Sponsors often are interested in expanding successful projects, adding related bolt-on infrastructure, or undertaking upstream or downstream investments. This interest directly conflicts with the lender interest in containing and managing project risks, by limiting activities of the project company and its ability to incur additional debt.

To balance these conflicting interests, common collateral agreements may specifically address the conditions on which an expansion or related project and the additional debt to fund it may be undertaken.

Expansion projects conducted by the project company or its affiliates that are borrowers or grantors of security in the existing project present the greatest risk to lenders. Common collateral agreements typically require, among other things, that the new expansion not adversely affect the existing project, that overall debt-to-equity and debt service coverage ratios be maintained in acceptable ranges, that the expansion be fully funded (debt and equity), that the additional or new senior debt share in the same collateral (under the existing common collateral agreement, on the same terms), and that the tenor of the new financing not be shorter than the existing financing, to protect those existing senior lenders who are not participating in the additional financing.

Any security on the new infrastructure will most likely be shared with all existing lender groups under the common collateral agreement. However, while the new infrastructure is being constructed, the lenders for that infrastructure as yet have nothing of value to contribute to the common security pool, so will typically not be permitted to participate in the existing common security. Once an expansion project is completed, these lenders will become full participants in the common security arrangement.

Depending on the jurisdiction of the project and the governing law of the security documentation (including the common collateral agreement), lenders will need to consider carefully whether the existing security package that was put in place on day one in respect of the initial financing will stretch to cover any new or increased indebtedness. In jurisdictions where day one security does not automatically cover additional indebtedness, it will be necessary to take and perfect new security. Note that any such new security will likely not rank *pari passu* with the original security. Lenders (whether senior or subordinate) who have provided new or additional financing and that consequently benefit from the second security package will need to be aware of their deferred status.

In contrast, completely new, though related projects (particularly upstream or downstream projects), if conducted by different entities, and not utilising security over the existing project, may be permitted with fewer restrictions. One typical restriction is that no related project be undertaken before the initial project is funded, so that the equity resources

and human resources in the sponsors' corporate families are not diverted before the original lenders' collateral is constructed and in operation. Others include the availability of sufficient debt and equity funds for the related project and confirmation that the related project not adversely affect the existing project. Collateral typically is not shared, so the lenders to the related project will not join the common collateral agreement, though special arrangements may be made with respect to common infrastructure shared by both the existing project and the related project, such as an export terminal.

VIII FIT FOR PURPOSE

As can be discerned from the discussion above, a common collateral agreement is a bespoke document, negotiated for the specific groups of lenders, a specific borrower and a specific project. This chapter has touched on a number of the key concerns in such agreements, but has only scratched the surface in addressing the great variety of arrangements that can be found in the project finance world.

PUBLIC-PRIVATE PARTNERSHIP AND THE PRIVATE FINANCE INITIATIVE

*Ania Gorna*¹

I OVERVIEW

i Emergence of public-private partnership

Although there is no uniform definition of public-private partnership (PPP), it is generally accepted that PPP refers to a collaboration between the public and private sector for the delivery of public services and infrastructure. It developed not only because of a need for increased investment in public infrastructure, but also as a method of improving service delivery by the public sector without having to resort to privatisation or the need for increased public funding as it is structured on a project finance basis. It differs from conventional public procurement in that it is generally a long-term, output-based arrangement with risks being allocated to the party best placed to bear them, with the aim of minimising cost overruns and delays by using private sector expertise, thereby achieving value for money. PPP involves not only the construction of the infrastructure, but more often than not also its long-term operation and maintenance.

PPP can take on various forms, the most common of which are private finance initiatives (PFIs), concessions and joint ventures. Other forms include integrators, strategic infrastructure partnerships and hybrid approaches. It should therefore be noted that while all PFIs will be PPPs, not all PPPs are PFIs. In this chapter, all forms of arrangements described above involving public and private parties will be referred to as PPPs, while PFI will be a reference to a subcategory of PPP.

The characteristics and development of the concept differ from jurisdiction to jurisdiction, as does the terminology used to describe it. For example, what is referred to as PPP in the Netherlands and South Africa will be referred to as PFI or PF2² in the United Kingdom, PFI in Japan and Malaysia, and P3 in the United States and Canada.³

ii Differences between PPP and PFI

The key difference between PPP and PFI is the manner in which the arrangement is financed. While PFI will utilise debt and equity finance provided by the private sector to pay for the

1 Ania Gorna is a senior associate at Norton Rose Fulbright LLP.

2 The 2018 Budget published on 29 October 2018 stated that PF2 (which replaced PFI in the UK) will no longer be used on new projects. <https://www.gov.uk/government/publications/budget-2018-documents/budget-2018>.

3 This chapter discusses PPP and PFI in general terms and sets out the underlying principles associated with them. Jurisdiction-specific treatment of PPP and PFI is beyond the scope of this chapter.

upfront capital costs, the same is not required in a PPP, where the parties have more freedom to structure their contributions. Depending on the structure, PPP can therefore include public sector finance.

A further difference is that while a PPP may be structured as a joint venture or through contract, a PFI will make use of a special purpose vehicle (SPV) that will not only enter into contractual arrangements with the relevant public sector entity, but will also enter into the financing arrangements with its shareholders and external financiers.

II VARIOUS MODELS OF FUNDING PUBLIC SECTOR CONTRIBUTION IN PPP

Funding refers to the sources from which funds are obtained to pay for project costs during the term of the project, as opposed to the sources or types of financing used to pay for the upfront capital costs. The contributions of the public sector in PPP projects are primarily funded from the general budget and user charges.

Revenue available as part of the general budget is collected from various taxes (such as income tax and VAT, or specific taxes such as emissions taxes or fuel excise that are allocated to a specific fund) and public sector income, which is then used for the payment of project costs. This is an indirect funding option as the revenue stream is not linked to a specific project. This model is usually employed in relation to projects with availability-based payments, such as PFIs involving government head office accommodation or prisons where the project itself will not generate revenues or where revenues are uncertain owing to the uncertainty of demand.

User charges on the other hand are a direct funding option, as the fees (such as tolls) collected from users of the service or from secondary services associated with the infrastructure (such as fees or income from petrol stations and restaurants located along the tolled road), will be used to pay for the costs of the project that is providing that service. This model is usually employed in relation to concession projects involving roads or utilities that are revenue generating.

The value capture funding model is based on the assumption that an investment by the public sector in infrastructure will result in increased land value in the surrounding area, and the model tries to monetise some of that value. This can be achieved by one-off or longer term payments, from taxes collected based on the increase in the value of land resulting from the new infrastructure, or from levying an additional tax upfront to fund the new infrastructure that the payer will later recoup by benefitting (whether directly through use, or indirectly through, for example, increased accessibility by others to its property) from that infrastructure.

Although the above are the most common funding models, the public sector may also try to obtain funding from donations, whether from the public in general or specific benefactors, sponsorships or specific levies or rates.

The options utilised will depend on the type of project, the legal framework, and the political and economic circumstances in the relevant jurisdiction, and may include a combination of the models. For example, road PPPs in the Netherlands are funded from the general budget, while in South Africa they are generally funded from user charges.

Since the funding model will only be as good as the private sector investors it attracts, it should be tailored in such a way that it provides them with comfort about the certainty and stability of funding, taking individual project and market conditions into consideration.

This should not discourage the public sector from trying to develop new and innovative ways to fund PPPs, but it needs to be prepared for investors that may be looking for a more conservative funding approach. For example, the Uganda Police Force accommodation project in 2010 was based on a plan to cross-subsidise the public sector infrastructure with income from a matched commercial development. However, at that time, the investors, who were still dealing with the consequences of the financial crisis, were not able to commit to the proposed structure.

III TYPES OF ASSETS FINANCED BY PFI

A multitude of public services and infrastructure are capable of being financed by PFI, on national or federal, provincial or state, and local levels, as well as government bodies. The type of assets financed will again be jurisdiction specific, and do not comprise a static group but will evolve over time to take into account the developing public sector services required to be provided. Projects with proven technologies are more common in PFI owing to the ability to assess the associated risk better, although that is not to say that new and unproven technology cannot be used for PFI – the parties will need to allocate the risk in a manner to ensure the project is bankable.

i Social infrastructure

Social infrastructure refers to government or accommodation infrastructure that is used to house a division of the public sector performing an administrative function, such as a specific government department, or to infrastructure that provides a social service, such as a police station. Since social infrastructure is typically not revenue producing, it is usually paid for with availability-based payments and funded through the general budget. The assets will include:

- a* courthouses (such as the PPP for the design, build, finance, maintenance and operation of the new district courthouse of Amsterdam in the Netherlands);
- b* correctional facilities (such as the New Grafton Correctional Centre, a new 1,700-bed facility located in northern New South Wales, Australia);
- c* educational facilities, including primary (such as the new schools PPP project for the finance, design, construction and maintenance of 15 schools in Victoria, Australia) and higher learning (such as the proposed greenfield PPP development of, among others, student and staff accommodation, and cultural facilities for the University of Abuja in Nigeria);
- d* hospitals and healthcare facilities (such as the upgrading and operation of the Port Alfred and Settlers District Hospitals for the Eastern Cape Department of Health in South Africa);
- e* government buildings and related facilities (such as PPP for the serviced head office, accommodation, as well as guest house facilities, for the Department of International Relations & Cooperation in South Africa);
- f* social housing (such as the social and affordable housing PPP project in Bahrain, involving the development of more than 2,800 social and affordable housing units in Al Madina Al Shamaliya and Al Luwzi); and
- g* sports stadiums and recreational facilities (such as the financing, design, construction and operation of the S\$1.3 billion Singapore Sports Hub integrated sports and leisure complex, including a stadium, aquatic centre and a multi-purpose arena).

ii Economic infrastructure

Economic infrastructure on the other hand refers to infrastructure that provides utilities, such as power production, and infrastructure that aids economic activities, such as ports. It is usually paid for through concession payments funded by user charges. The assets will include:

- a* airports and supporting facilities (such as the PPP-style project for the renovation, extension and operation of the Queen Alia International Airport in Amman, Jordan, with a unique financing structure comprising both conventional financing and an Islamic finance *istisna'a* and *ijarah* facility);
- b* gas transmission and distribution systems (such as the liquefied natural gas receiving and regasification terminal in Bahrain, with a capacity of 400 million standard cubic feet per day (expandable to double this capacity));
- c* ports and marine terminals (such as the US\$1.5 billion greenfield deep sea container port on the Lekki peninsula in Lagos State, Nigeria);
- d* power (such as the US\$142 million KivuWatt methane to power project, at Kibuye, on the shore of Lake Kivu in Rwanda, which utilises innovative technologies that are unique to this project);
- e* transmission facilities and systems (such as the 500 kilovolt, 500km, C\$1.65 billion transmission line for Alberta Electric System Operator, the largest public-private financing ever completed in Canada);
- f* rail, including passenger rail (such as the Sydney Light Rail Project PPP in Australia involving the finance, design, construction, testing and commissioning of a new light rail line between the CBD and south east Sydney, and the operation and maintenance of the Sydney Light Rail network, which includes the new CSELR and existing inner west light rail) and mass transit (such as the design, construction and maintenance of the A\$6 billion Melbourne Metro Tunnel and Stations project involving twin 9 km rail tunnels underneath the CBD and five underground stations);
- g* roads (such as the €1 billion Blankenburg Connection project in the Netherlands to improve road links between Rotterdam and its port, the largest PPP project awarded in the Netherlands to date) and bridges (such as the US\$374.2 million BOT PPP Rosario Victoria 608 metre toll bridge project in Argentina);
- h* technology, including broadband and telecommunications (such as the Red Dorsal Fiber Optic PPP in Peru on a country-wide scale, and financed through a US\$274 million greenfield project bond);
- i* tourism (such as the 11 PPPs entered into by the South African National Parks);
- j* waste and waste-to-energy (such as the construction and commissioning of Australia's first thermal waste-to-energy facility in Kwinana, Western Australia, which will process 400,000 tonnes of waste into 36 megawatts of baseload energy);
- k* water (such as the Kigali bulk water treatment plant PPP in Rwanda, which will provide 40 million litres a day of fresh and clean water, being 40 per cent of the Kigali city's potable water requirements, and which is also the first project financed bulk surface water project in sub-Saharan Africa (outside of South Africa);
- l* wastewater (such as the Core Area Wastewater Treatment Program in Canada within the Capital Regional District, which includes a wastewater treatment plant, a residuals treatment facility, pump stations and conveyance pipelines); and

- m* desalination plants (such as the seawater desalination plant PPP for the provision of irrigation and water supply in the Grand Agadir and Souss-Massa regions Morocco, which will have a production capacity of 275,000 cubic metres per day, expandable to 400,000 cubic metres per day).

iii Other

Other infrastructure, including:

- a* defence (such as the Allenby & Connaught PFI project in the United Kingdom involving the redevelopment of garrisons and the construction of new barracks); and
- b* water defences (such as the Eefde Lock PPP for the design, build, financing, operation and maintenance of the second lock on the Twente Canal in The Netherlands, including supporting infrastructure).

IV PRINCIPAL CHARACTERISTICS OF PFI FINANCING

Since most PFI financings are also categorised as project finance, the same principal characteristics will apply to both, including being structured on a limited or non-recourse basis through an SPV (therefore on an off-balance sheet basis), with the main difference being that the public sector is a party to the project documentation.

Owing to the complexity and costs associated with PFI, only large projects (or a collection of smaller, related projects grouped into one) will be financed in this manner. PFI is therefore characterised by a significant upfront capital investment during the construction period, resulting in a high (usually between 90:10 and 80:20) debt-to-equity ratio. As the returns on the capital investment will be realised over the life of the project (typically 20 to 30 years), the PFI financing will be long-term financing to align it with the lifecycle requirements.

The equity portion is usually made up of share capital and subordinated shareholder loans provided by the sponsors and financial investors, although often externally financed during the construction phase. The debt portion is usually provided by commercial and institutional lenders, and to a lesser extent debt capital markets. As the SPV will only start receiving income after the construction of the infrastructure is completed, the repayment of debt will be aligned with cash flows. In the case of a default, the lenders will have the option to step in.

TAX-EQUITY FINANCING

Scott Cockerham, Brian Greene, Kelann Stirling and Mateo Todd Aceves¹

I OVERVIEW

Tax-equity financing broadly encompasses investment structures in which a passive equity investor looks to achieve a target internal rate of return based primarily on United States federal income tax benefits that are expected to be available to it with respect to an investment in a particular asset. Tax-equity investors are typically profitable, tax-paying entities such as banks, insurance companies, certain utilities and general corporate entities. As discussed in greater detail below, tax-equity investors typically invest alongside a developer who cannot make efficient use of the tax benefits associated with the underlying asset. Tax-equity financing structures are driven by tax laws that are unique to the United States; accordingly, this chapter focuses specifically on the US project finance market.

The US government subsidises the cost of many renewable power projects with federal income tax benefits. These subsidies primarily include tax credits and the ability to write off the cost of a project on an accelerated basis. There are two general classes of tax credits available for renewable projects: investment tax credits and production tax credits. The type of credit available for any particular project largely depends on the technology involved.

The first type of credit available for renewable projects are investment tax credits, which are available for investments in solar equipment, fuel cells, small wind energy property (i.e., 100kW or less), fibre-optic solar, geothermal projects, combined heat and power property, geothermal heat pump property and microturbines.² The credits are calculated as a percentage of a project's cost, and are available in their entirety in the year the equipment is placed into operation.

The credit amount varies depending on the technology and the year in which the project begins construction. Under the current framework, solar projects that begin construction by the end of 2019 qualify for a 30 per cent investment tax credit. The credit phases down to 26 per cent for projects beginning construction in 2020 and 22 per cent for projects beginning construction in 2021. Projects meeting these deadlines must be placed in service by the end of 2023 to qualify for a credit above 10 per cent.³

The credit drops to a permanent 10 per cent level for projects that begin construction in 2022 or later. The credit for fuel cells, small wind energy and fibre-optic solar is subject to a similar phase-down schedule, such that the credit expires if construction does not begin

1 Scott Cockerham, Brian Greene and Kelann Stirling are partners, and Mateo Todd Aceves is an associate at Kikland & Ellis LLP.

2 See 26 U.S.C. § 48(a).

3 See 26 U.S.C. § 48(a)(6)(A)(i)-(ii).

until 2022 or later, or if the project fails to be placed in service before 2024.⁴ Combined heat and power, geothermal heat pump and microturbine projects qualify for a 10 per cent credit as long as construction begins before 2022. Geothermal projects benefit from a permanent 10 per cent credit.⁵

The second type of tax credit for renewables projects is the production tax credit. The production tax credit is available for investments in wind, biomass, geothermal, landfill gas, municipal solid waste, hydropower, and marine and hydrokinetic facilities. Unlike the investment tax credit, the production tax credit is claimed over a 10-year period beginning on the date the project is placed in service. The amount of the credit depends on the amount of energy produced, and is adjusted annually for inflation.⁶

The value of production tax credits similarly varies depending on the asset class and year in which construction begins. For wind projects, the full value of the credit is available if construction started before 2017. The credit phases down by 20 per cent for each year thereafter, bottoming out at 40 per cent for projects that do not begin construction before 2020. The credit expires for projects that do not begin construction until after 2019.⁷ The production tax credit is only available for the other eligible technologies if construction began before 2018.⁸

Apart from tax credits, most of the equipment used in renewables projects qualifies for depreciation over an accelerated five-year period.⁹ Depreciation is an annual tax deduction for the wear and tear associated with equipment used in a trade or business. Certain renewable energy assets may alternatively qualify for immediate (i.e., 100 per cent) depreciation in the year in which the equipment is placed in service.¹⁰

One major structural limitation of the US tax subsidy regime for renewables is that the tax benefits are useless to someone who does not owe taxes. Further, special rules make it harder for wealthy individuals, S corporations and closely held C corporations (i.e., a corporation in which five or fewer individuals own more than half of the value of the stock) to claim tax credits and accelerated depreciation.¹¹

Developers are rarely able to make efficient use of tax benefits, so they enter into what is effectively a bartering transaction with a tax-efficient investor (called a 'tax-equity investor') to whom the developer will allocate nearly all of the tax benefits in exchange for cash capital contributions for the project.

There are three primary tax-equity financing structures in the US renewables market. They are the partnership flip, the inverted lease and the sale-leaseback.

i Partnership flip

Partnership flips are the most common structure in the US renewables market. In a typical deal, the developer either contributes a project or sells it to a partnership formed between it

4 See 26 U.S.C. § 48(a)(6)(B).

5 The IRS has issued multiple sets of guidance on what it means to 'begin construction.' See IRS Notice 2013-29, IRS Notice 2013-60, IRS Notice 2014-46, IRS Notice 2015-25, IRS Notice 2016-31, IRS Notice 2017-04, and IRS Notice 2018-59.

6 See 26 U.S.C. § 45.

7 See: *id.*

8 See 26 U.S.C. § 48(d).

9 See 26 U.S.C. § 168(g)(3)(C).

10 See 26 U.S.C. § 168(k).

11 See generally 26 U.S.C. § 465; § 469.

and the tax-equity investor, to which the tax-equity investor contributes cash. The tax-equity investor is typically allocated 99 per cent of the tax benefits and some portion of the cash (usually around 30 per cent or less, depending on the project) until the tax-equity investor reaches a target yield or a fixed date passes. The fixed date will be no earlier than five years after the project is put in service. Once tax-equity reaches the applicable benchmark, its share of tax items will decrease (usually down to 5 per cent), along with its share of cash. The developer will get the bulk of the cash and tax items for the remaining life of the partnership.

The basis used to calculate the investment tax credit is the partnership's cost to acquire or produce the project. If the partnership purchases the project from a developer, its credit-eligible basis will generally be the allocable credit percentage multiplied by the purchase price, subject to adjustment to remove items such as transmission equipment and intangibles that are not eligible for the credit. If the project is contributed to a partnership by the developer, rather than sold, the basis is the contributor's cost. The depreciable basis of the project is reduced by half of the investment tax credits claimed by the project's owner. Production tax credits do not require a basis reduction.

Partnership flip structures are largely dictated by IRS safe harbour rules for wind projects.¹² If all of the rules are followed, the IRS will respect the partnership's allocation of tax credits. The IRS has technically adopted the position that the safe harbour rules only apply to wind projects, but the renewables industry largely applies the rules across technologies in the absence of any other technology-specific guidance.¹³

Among other rules, the safe harbour requires the tax-equity investor to invest at least 20 per cent of its total expected investment upfront. In addition, at least 75 per cent of the total amount of the expected investment must be fixed in amount and certainty of payment. The safe harbour also requires the tax-equity investor to take neither more than 99 per cent of the tax items nor less than 5 per cent of the tax items. (There are no similar restrictions on cash sharing.) Further, the developer typically has an option to buy the tax-equity investor's interest at fair market value, but the tax-equity investor cannot force the developer to buy its interest.

Tax-equity investors in partnership flips typically want indemnification for lost tax credits and depreciation, but only if there is a breach of a representation or covenant. In investment tax credit projects, developers are usually asked to represent that the project's basis for tax credit purposes is its true fair market value. The risk of losses owing to structural risks, such as non-compliance with the safe harbour rules, is generally borne by the tax-equity investor.

ii Inverted lease

Inverted leases are another common financing structure, though they are only available for projects that qualify for investment tax credits. Unlike partnership flips and sale-leasebacks, where the project owner is the only party entitled to tax benefits, a special rule for inverted leases allows the lessor to pass the investment tax credit on to the lessee. The lessee claims the

12 See Rev. Proc. 2007-65.

13 This approach was confirmed to an extent in a 2015 internal memo in which the IRS national office analysed a transaction using the criteria from the wind safe harbour, even though the memo formally concluded that the wind safe harbour did not apply to solar projects as a technical matter. See Chief Counsel Advice 201524024 (12 June 2015).

credit based on the project's fair market value (as opposed to the project's cost). The lessee must recognise income ratably over five years in an amount equal to one-half of the tax credits. The lessor is entitled to all of the depreciation.

There are two types of inverted leases: a basic structure where the developer is the lessor and leases the project to a tax-equity lessee, and an overlapping ownership structure where the lessee is a minority (typically up to 49 per cent) owner of the lessor. One of the benefits of the inverted lease is that it allows the parties to split up the tax benefits and allocate them among the parties who want them the most. For example, if a tax-equity investor only wants tax credits and the developer has some appetite for depreciation, the basic inverted lease structure makes more sense than a standard partnership flip. The overlapping ownership variant would be an improvement over the basic structure if the parties want some of the depreciation to go to the tax-equity investor.

Another advantage of the inverted lease is that the tax credit basis step-up to fair market value is free in the sense that entering into a lease is not a taxable event. The step up can have a tax cost in the other structures because the sale of a project to a flip partnership or to the tax-equity investor in a sale-leaseback is a taxable event for the developer.

Similar to solar partnership flips, there is no solar-specific guidance for inverted leases. The industry largely follows guidelines for historic tax credit transactions (which use inverted leases but call them 'master tenant' structures), and leasing principles from guidance for leveraged leasing transactions.¹⁴ These guidelines are conceptually similar to the wind partnership flip guidelines in that they try to put the tax-equity investor more at risk than a lender would be. For example, like the partnership flip safe harbours, the tax-equity investor needs to make at least 20 per cent of its investment up front. There are also some notable ways in which the historic tax credit guidance differs from the partnership flip guidance. One way is that the tax-equity investor may have a right to put its interest to the developer for less than fair market value, but the developer may not have a call option (i.e., the exact opposite of the flip guidelines).

In terms of indemnities, tax-equity typically expects complete coverage for lost tax credits due to anything other than a structural risk that it explicitly agrees to bear in the transaction documents. These typically cover issues such as the lease being respected as a true lease and compliance with the safe harbour guidance.

iii Sale-leaseback

A third common tax-equity structure is the sale-leaseback. As its name implies, it involves the sale of a project by a developer to a tax-equity investor, who simultaneously leases the project back to the developer. This structure is only available for investment tax credit transactions.

In this structure, the tax-equity investor's basis for tax credit and depreciation purposes is the purchase price that it pays to acquire the project. Tax-equity's depreciable basis will be reduced by one-half of the amount of the tax credits.

This is the only investment tax credit structure in which the tax-equity investor does not need to fund into the transaction before the project is placed in service. A special rule permits the tax-equity to claim credits as long as the sale-leaseback happens within three months of the project's placed in service date.¹⁵

¹⁴ See Rev. Proc. 2014-12; Rev. Proc. 2001-28.

¹⁵ See: Treas. Reg. 1.47-3(g)(1).

Both parts of the transaction still need to happen simultaneously. The extra three months makes sale-leasebacks an attractive option for developers who are not able to find a tax-equity investor during construction or pre-construction. The developer will recognise taxable gain on the sale of the project. Lease terms are typically 10-20 years. The developer often has a purchase option to re-acquire the project for its then-fair market value when the lease ends.

In sale-leaseback transactions, the indemnity coverage typically extends to all tax benefits, except for any loss owing to a fundamental structuring issue (e.g., the tax-equity investor not being respected as the owner of the project for tax purposes). If the sale occurs after the project is in service, the developer typically bears the risk that the transaction did not occur within the three-month deadline.

II INTERPLAY BETWEEN DEBT AND TAX-EQUITY

There are three primary sources of financing for renewable energy projects in the United States: tax-equity (covered above), sponsor equity and debt. Generally, tax-equity will only cover around 35 to 45 per cent of the total capital cost for solar developments and 50 to 60 per cent of the total capital cost for wind developments, so sponsors need to complete the capital stack with sponsor equity or debt (or both). More credit-worthy sponsors may be able to fill the entire gap with sponsor equity or corporate (i.e., balance sheet) financing, but for many developers that is not an option. As a result, many renewable energy projects are financed by a combination of tax-equity, sponsor equity and debt.

Debt financing is a broad term that could include non-recourse construction or long-term financing, back-leverage financing, development loans, securitisations, portfolio financings, corporate (recourse) financing, etc. The renewable project debt toolkit has many options. Below, we focus on two commonly used debt structures for tax-equity projects, and the interplay between debt and tax-equity. We have not covered long-term project level debt below because, largely as a result of tax-equity investors unwillingness to permit project-level collateral, it is much less common than back-leveraging financing.

i Construction bridge facility

Tax-equity investors typically will not take construction risk. And the greatest capital expenditures for any project typically are incurred during the construction phase. As a result, project developers require significant financing before tax-equity investment becomes available. One option is to obtain a construction bridge facility. This typically would be a non-recourse fully secured loan from one or more commercial banks (or more recently, direct lenders and private debt sources) that are willing to take on construction risk. A construction bridge loan will be drawn over the course of construction of the project, as costs are incurred.

Construction debt is sized on the basis of the estimated capital costs to build the project. In addition, construction lenders typically will require the sponsor to provide a percentage (usually around 10 to 15 per cent) of the capital costs via sponsor equity (so that the sponsor is appropriately motivated to get the project built on time and on budget). Built into the capital cost estimate will be some amount of contingency, but if there are cost overruns prior to completion, ultimately the sponsor will have to fund them or will risk defaulting on its construction debt and losing its equity in the project.

Construction bridge loan lenders typically require a full security package, including security over all of the project company's assets, and the ownership interests in the project

company, along with a tight covenant package. Where the construction debt will be repaid in whole or in part with tax-equity, typically the construction bridge lenders will require that the sponsor have a tax-equity commitment in-hand. In that case, the construction lender will require that such commitment forms part of the collateral package so that the project can benefit from the tax-equity commitment even if the construction lenders foreclose on the project.

The construction bridge facility will be repaid upon project completion by tax-equity financing and, if the developer wants to finance its portion of the cost of a project, by back-leverage debt. While it is not typical, in some cases, a tax-equity investor will also be a construction bridge facility lender, such that its construction bridge debt is repaid with tax-equity investment from the same provider.

In renewable projects that qualify for an investment tax credit and utilise a partnership flip structure, the construction bridge facility will often be repaid by tax-equity invested in two phases – first, 20 per cent of the committed tax-equity is invested at mechanical completion and second, the remaining 80 per cent of the committed tax-equity is invested following substantial completion of the project. Tax-equity investors will not accept a position structurally subordinate to long-term debt, but generally will accept the project level security granted to construction bridge lenders during the period between mechanical completion and substantial completion, subject to the terms of an interparty agreement. An interparty agreement provides for certain agreements between the lenders and the tax-equity investor to address the scenario where mechanical completion is achieved, but the project never achieves substantial completion. Typical provisions in an interparty agreement include requirements for the lender's agent to provide the tax-equity investor notice of any event of default under the debt facility, cure rights on behalf of the tax-equity investor, and, where applicable, restrictions on lender foreclosure that would lead to an investment tax credit recapture (see further discussion on investment tax credit recapture below). Other than certain events of default related to bankruptcy of the project company or the invalidity of project-level security, lenders are typically restricted from foreclosing on the assets of the project company until the expiration of the investment tax credit recapture period and can foreclose on the equity in the project company subject to restrictions in the tax-equity documents or other conditions agreed with the tax-equity investors. Some interparty agreements also provide tax-equity investors with an option to purchase the debt at fair market value. The interparty agreement may also address certain rights retained by the tax-equity investor or the lenders, for example, with respect to proceeds of insurance, or claims for equity contributions or against the sponsor.

ii Back-leveraged facility

Back-leveraged debt is different from construction or term-loan debt at the project level in that it is incurred by a borrower in the ownership chain above the project company and is not secured by a security interest in the assets of the project company. This is preferable from the perspective of the tax-equity investor to project-level debt, because tax-equity investors do not want to take the risk that a secured lender would foreclose on the project assets during the operational period.

The typical parties in a back-leverage financing include:

- a* Project Company: A special purpose entity that is wholly owned by a tax-equity partnership. It holds no assets other than the project.

- b* Holdco: A tax-equity partnership owned by the tax-equity investor and the sponsor (through special purpose entities).
- c* Class B Member: A special purpose entity owned by the sponsor and, in some cases, sponsor equity investors.
- d* Class A Member: The tax-equity investor.

Given that back-leverage lenders do not have project level security, they will be highly focused on (1) the ability of borrower to get cash distributions from the project, (2) the ability to control decisions of the project company to take any action that could impair the value of the project or its ability to earn revenues sufficient to repay the back-leverage debt and pay any amounts required to be paid to the tax-equity investor, and (3) the change of control and transfer restrictions in the tax-equity documentation. If the tax-equity investor is permitted to divert cash flows for indemnification claims or other reasons without the Class B Member having priority over amounts to repay the back-leverage lenders, the back-leverage lenders may require an indemnity from the sponsor. The back-leverage lenders' collateral usually will include a pledge of the shares in the Class B Member, as well as a pledge over the Class B Member's bank accounts. In the event of a default, the back-leverage lenders may foreclose on such shares or bank accounts (or both) and look to the revenues received from the project company via distributions to be repaid. Accordingly, the back-leverage lenders generally will require change of control and transfer restrictions that provide for objective criteria that would not be triggered in the event of a foreclosure on the ownership interests in the Class B Member.

Unlike construction debt lenders, which will have significant consent rights over the actions of the project company, the back-leverage lenders will have only limited control rights indirectly through the covenants in the back-leverage financing agreement and voting rights of the Class B Member in the tax-equity documentation. If the Class B Member permits the project company to take an action that is in violation of those covenants, then it will trigger an event of default under the back-leverage financing agreement (which, if not cured, will enable the back-leverage lenders to foreclose on the shares in the Class B Member).

It is worth noting that construction bridge debt and back-leverage debt can be documented in a single loan agreement. This has the benefit of being more streamlined. The borrower under the loan agreement is the Class B Member. During construction, the project company will provide an upstream guarantee of the debt and will provide a lien on all of the project company's assets and shares. In addition, the debt will be secured by the shares in the Class B Member. Upon completion, the upstream guarantee and the lien on the project company's assets and shares will fall away.

iii A note on recapture risk

The investment tax credit vests 20 per cent per year over a period of five years. Certain events may trigger the recapture of the investment tax credit before it has fully vested, causing the tax-equity investor to lose a portion of the benefit of its investment. As a result, tax-equity investors typically require sponsors to indemnify them for recapture risk. There are two types of recapture risk. First, there is true recapture where the project company loses the unvested portion of tax credits as a result of some event that occurs after the project becomes operational. Some examples of events that can result in true recapture are certain disposals, such as taking the project out of service or selling it to a third party. Such events are largely within the control of the sponsor.

Second, disallowance can result from a failure to properly calculate the tax credit benefit, often as a result of a misallocation of costs as eligible to benefit from the tax credit that later are found to be inflated or ineligible. This scenario is more challenging for a sponsor trying to quantify recapture risk. To address this concern, sponsors typically will obtain detailed appraisals on the value of the project. In addition, tax-equity investors sometimes will obtain insurance coverage for any losses resulting from investment tax credit recapture (and the costs of interest and penalties that may be assessed by the IRS in connection with such recapture).

Recapture risk is an issue for lenders to the extent that the tax-equity documentation allows cash sweeps to the tax-equity investor to cover recapture obligations ahead of scheduled principal and interest due and payable to the lenders. To address this risk, sponsors often must provide the lenders with an indemnity covering these cash diversions.

III RECENT DEVELOPMENTS IN TAX-EQUITY

As further described below, a wide variety of developments affecting the legal, commercial and technological landscape of tax-equity financings have developed in recent years.

i Federal Circuit *Alta Wind* decision

In July 2018, a decision from the US Court of Appeals for the Federal Circuit threw into question the widespread market practice of allocating nearly all of the purchase price paid for renewable assets to a development's investment tax credit-eligible generating equipment.¹⁶ The case, *Alta Wind I Owner-Lessor C et al v. United States*, relates to one of the country's largest renewable energy developments, which spans six windfarms in California each supported by long-term power purchase agreements with Southern California Edison. The project's developer financed five of the wind farms with sale-leasebacks (as described in detail in Section I.iii above) and sold one wind farm outright. At the time of the sale-leaseback financings, the federal government had made available a cash grant equal to 30 per cent of a taxpayer's basis in renewable energy generating equipment under a programme included in the post-recession stimulus spending legislation. In this case, investors in the *Alta Wind* projects claimed around 95 per cent of their investment was allocable to the generating equipment of the developments (and not the land, long-term power purchase agreements or interconnection assets of the business purchased), and thus eligible for cash grant payments.

At issue in the case was whether transactions of this sort must abide by the rules governing the allocation of purchase price provided under Section 1060 of the Internal Revenue Code, which generally applies to acquisitions of assets that constitute a trade or business. Where it applies, Section 1060 requires the purchase price to be allocated in a waterfall fashion among seven different asset classes. Any portion of the purchase price that is not allocable to one of the tangible asset classes (e.g., costs allocable to equipment) is allocated to intangible assets and goodwill and going concern value. Cost allocable to intangible assets and goodwill and going concern value are not eligible for cash grant payments or, by analogy, investment tax credits.

The initial 2016 decision from the US Court of Federal Claims found for the tax-equity investors and determined that the Section 1060 purchase price allocation mechanics need not

¹⁶ See: *Alta Wind I Owner-Lessor C et al. v. United States*, 2018 U.S. App. LEXIS 20931 (Fed. Cir. 27 July 2018).

be applied in the case of a business that has no goodwill – such as power plant that has not yet started operation.¹⁷ The Federal Circuit overturned that decision, finding that a business – even one that is not yet operating – may have goodwill attributable to its existing assets, such as a long-term offtake agreement or the inherent ‘value add’ of different contracts packaged together at one project entity. It remanded the case to the Court of Claims for further factual review. Importantly, the court did not settle the question of whether an offtake agreement attached to a specific generation facility has independent value. The implication of the Federal Circuit’s decision – that power purchase agreements have intangible value – conflicts with the understanding and practice of many industry participants, who will watch carefully to see how the Court of Claims ultimately settles this allocation question on remand.

ii Rise of unconventional offtake arrangements

In a typical project financing, long-term contracted cash flows payable by a creditworthy counterparty are the key element in ensuring a project’s ‘bankability’ for lenders. Historically, such cash flows have been secured via a power purchase agreement with a utility or hedging arrangements with highly rated financial counterparties. Because of the need for credit worthy counterparties able to commit to long-term offtake arrangements, the market for such counterparties has traditionally been limited. Moreover, many of these market participants have been ill-suited to contract with renewable energy, tax-equity funded projects, which typically feature shorter debt tenors and less predictable production capacity.

Recently, however, new and innovative offtake structures have begun to be accepted in the market. New market entrants in the ‘risk solution’ space have begun to provide hedging services for renewable energy projects. These products, first seen in the market in 2016 and generally described as proxy revenue swaps, provide for lump sum payments to producers regardless of generation fluctuation due to weather. New institutional capital from reinsurance providers able to underwrite weather risk presents an attractive opportunity for alternative offtake arrangements.

Corporate purchasers of electric capacity represent a fast growing portion of the offtakers in the United States. Corporate offtakers, typically motivated to purchase from renewable energy producers in order to achieve sustainability targets, have moved from simply purchasing green energy certificates or other products from conventional suppliers, to helping finance the development of assets that will provide dedicated renewable energy for their consumption needs. In a typical arrangement, corporate offtakers utilise a synthetic or virtual power purchase agreement, which provides for a long-term financial hedge for the purchase of renewable energy and the delivery of green certificates at a fixed price, demonstrating the corporate purchaser’s use of renewable power. In other cases, a physical or ‘sleeved’ power purchase agreement may be used, where arrangements are made with grid provider or utilities to physically deliver power directly from a renewable energy producer to the corporate offtaker.

While this new source of offtake partners represents a potential boon to renewable energy developers and investors, corporate offtakers present unique challenges for project sponsors and lenders. In particular, many corporate purchasers are less creditworthy than traditional utility or commodity trading offtakers, and are unwilling or unable to commit to long-term (20-year plus) fixed-price offtake obligations. Project lenders are typically

¹⁷ See: *Alta Wind I Owner-Lessor C et al v. United States*, 128 Fed. Cl. 702 (2016).

unwilling to accept material credit risk in offtake agreements, but given excess liquidity in the market, a limited universe of prime traditional offtakers, and the strength of certain corporate offtakers, an increasing number of transactions have been closed with synthetic corporate power purchase agreements. To address divergence between project debt tenor and the length of typical corporate power purchase agreements, projects have included hedged merchant tails and amortisation profiles carefully sculpted to match revenue profiles. Opportunities also exist for innovative corporate offtake arrangements in developing markets, where corporate offtakers are invested in the development of high-quality infrastructure in the relevant region.

iii Solar tariff impact

On 22 January 2018, a 30 per cent tariff was imposed on solar imports to the United States, with a 2.5 gigawatt annual exclusion.¹⁸ This tariff ramps down 5 per cent each year through 2021 and expires in 2022.¹⁹ While several developers reportedly have cancelled or postponed projects because of cost increases caused by this tariff, there are several mitigating factors which have softened the tariff's initial impact: (1) certain types of solar cells and panels, accounting for one-quarter to one-third of the US market, are not affected by the tariff; (2) manufacturers knew that the tariff was likely and imported equipment prior to the tariff taking effect (meaning that upwards of a year of supply has avoided the tariff); (3) some manufacturers, including both US-based companies such as First Solar and foreign-based companies such as JinkoSolar, moved manufacturing operations to the United States, thereby avoiding the tariff; and (4) the general decrease in the equipment and installation costs and other market factors has offset cost increases from the tariff.

iv Decreasing equipment and installation costs

Among the largest capital costs in any solar generation project is the generating equipment. The photovoltaic (PV) panels, inverters, racking hardware and associated infrastructure are a key cost consideration for each project. In recent years, the capital investment costs associated with solar infrastructure have dropped dramatically, increasing the competitiveness of solar projects as compared to conventional generation options – even before tax incentives are considered. The US Energy Information Administration found that, between 2010 and 2017, costs for utility-scale solar PV declined 10 to 15 per cent annually.²⁰ Researchers at Lawrence Berkeley National Laboratory identified similarly positive trends, noting that, since the period 2007 to 2009, the median price of installed photovoltaic systems has fallen by two-thirds.²¹ These developments have helped contribute to a dramatic overall drop in the cost of renewable energy production; in its 2017 'levelized cost of energy' analysis, Lazard found that the newest solar thin-film technology could compete on price with modern combined-cycle gas generation facilities.²²

Interestingly, the primary driver in cost reductions between 2012 and 2016 was not price reductions in PV panels themselves. As the market for PV panels and related infrastructure tightened, 'hard cost' equipment prices remained high and the majority of cost reductions

18 See: <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2018/january/president-trump-approves-relief-us>.

19 See: id.

20 See: <https://www.eia.gov/todayinenergy/detail.php?id=35432>.

21 See: https://emp.lbl.gov/sites/default/files/lbnl_utility_scale_solar_2018_edition_report.pdf.

22 See at page 2: <https://www.lazard.com/media/450337/lazard-levelized-cost-of-energy-version-110.pdf>.

were found in lowering ‘soft costs’ (installation, transaction expenses, investor returns, etc.) rather than the cost of solar generating modules.²³ Since Q1 2017, however, a resurgence in PV module supply has helped lower hardware costs.²⁴ In 2017, the National Renewable Energy Laboratory (NREL) tracked an index of solar module manufacturers and observed aggregate deliveries of over 24 per cent year over year.²⁵ In its Q1 2018 report, the NREL found that benchmark costs for installed commercial solar generating systems had reached US\$1.05 (per watt, direct current) for fixed-tilt projects and US\$1.13 (per watt, direct current) for single axis tracking systems.²⁶ As prices have declined over time, solar development has continued to grow. At the end of 2017, nearly 600 utility-scale PV projects were in commercial operation in the United States, and nearly 20 per cent of those achieved commercial operation in 2017.²⁷ While cost reductions help drive the growth of solar installations, unpredictability in capital costs can also make project auction bids difficult. Solar investors and other market participants are likely to continue to benefit from decreased costs, even as price movement creates challenges for valuation analysis.

v Offshore wind

There is a tremendous buzz around offshore wind projects in the United States. 2018 was an exciting year for this developing market, wrapping up with the announcement by the Bureau of Ocean Energy Management and the US Secretary of the Interior in December 2018 that three wind energy site leases off the Massachusetts coast were awarded to three winning bidders for a total of US\$405 million²⁸ or approximately six times the revenue from all previous auctions combined.²⁹

Many offshore wind developers are focused on the East Coast, with 23.4 gigawatts of the US offshore wind pipeline (out of approximately 25 gigawatts in total) situated there, but there are also projects in development in Hawaii, California and the Great Lakes.³⁰

There are several market factors behind the recent uptick in this market; including the expectation of massive available resources, significant decreases in capital costs (Ørsted report a 63 per cent decrease in prices between 2010 and 2016) and new renewable energy, climate and economic development targets being set by state governments.³¹

This is a space to watch for 2019, particularly as only those offshore wind projects that begin construction during 2019 will be able to benefit from the investment tax credit.

vi Battery storage

Bloomberg NEF has estimated that ‘the global energy storage market will grow to a cumulative 942 GW/2,857 GWh by 2040, attracting \$620 billion in investment over the next 22 years.’³²

23 See: http://eta-publications.lbl.gov/sites/default/files/tracking_the_sun_ix_report.pdf.

24 See at page 48 <https://www.nrel.gov/docs/fy17osti/68925.pdf>.

25 See at page 55: <https://www.nrel.gov/docs/fy18osti/71493.pdf>.

26 See at pages 41-42: <https://www.nrel.gov/docs/fy19osti/72399.pdf>.

27 See at page 5: https://emp.lbl.gov/sites/default/files/lbnl_utility_scale_solar_2018_edition_report.pdf.

28 See <https://www.doi.gov/pressreleases/bidding-bonanza-trump-administration-smashes-record-offshore-wind-auction-405-million>.

29 See: <https://www.rtoinsider.com/offshore-wind-massachusetts-boem-auction-107874/>.

30 See: <https://acore.org/investors-watching-closely-in-the-wake-of-recent-offshore-wind-announcements/>.

31 See: id.

32 See: <https://about.bnef.com/blog/energy-storage-620-billion-investment-opportunity-2040/>.

When and how battery storage projects will begin to become more viable from a financing perspective is a recurring discussion topic among industry participants. Increasingly, that conversation is focused on the benefits of combining solar and storage projects. Under current IRS guidance, the storage portion of these combined projects qualifies for investment tax credits only if at least 75 per cent of the energy used to charge the battery comes from the solar generating equipment. Further, if the solar input is less than 100 per cent, the investment tax credits are reduced to the extent of the non-solar input.³³ Increases in the percentage of non-solar input in subsequent years may cause the IRS to recapture a portion of previously claimed credits.

33 See: IRS Private Letter Ruling 201308005.

ISLAMIC FINANCE

*Munib Hussain*¹

I INTRODUCTION

Islamic finance is concerned with the conduct of commercial and financial activities in accordance with Islamic law, or *shariah* (derived primarily from the *Quran*, the holy book of Islam, and the *Sunnah*, words or practices instituted or approved by the Prophet Muhammad (PBUH)). Islamic finance emphasises productive economic activity over pure speculation, and encourages transaction counterparties to share profits and losses to promote collaborative efforts.

For project financings to be *shariah*-compliant, structures and techniques have been developed to accommodate the priorities of such Islamic-compliant participants. This chapter will:

- a* outline the key principles relevant to Islamic finance transactions (Section II);
- b* examine the typical funding structures deriving from those principles (Section III);
- c* discuss the application of Islamic finance principles and structures in a project finance context (Section IV); and
- d* address the particular challenges of combining Islamic finance with conventional project financing techniques (Section V).

II PRINCIPLES OF ISLAMIC FINANCE

Shariah is a body of law applicable to Muslims governing conduct within Islam, and is derived from two main sources; the *Quran* and the *Sunnah* (the words and deeds of the Prophet Muhammad (PBUH)).

There are a number of prohibitions under *shariah* which are relevant to commercial activities. Generally, if something is not prohibited (*haram*), it is allowed under *shariah* (*halal*). Therefore, to ensure compliance with Islamic law, individuals and companies must seek ways to arrange their affairs in accordance with a set of key principles that underpin the relevant prohibitions.

The *shariah* principles that are relevant to project finance are as follows:

i **Riba (excess)**

Riba means making unjust or excessive gains from commercial arrangements while assuming little or no risk, and is strictly prohibited under *shariah*. The prime example of *riba* is the charging of interest on a loan – mere exposure to the creditworthiness of the borrower over

¹ Munib Hussain is a senior associate at Milbank, Tweed, Hadley & McCloy LLP.

time is seen as insufficient risk for the reward received. The effect of this principle is that any provision involving payments that could be deemed interest would be void. Instead, the lender must participate in some way in the potential profits and losses of the enterprise being financed.

ii Gharar (uncertainty)

The prohibition on *gharar* means that any agreement whose fundamental terms are deemed too uncertain is invalid under *shariah*. For example, some insurance contracts where there is uncertainty around the occurrence of an event could be void under this principle. This is to encourage disclosure of details as between the parties and limit the impact of chance.

iii Maysir (speculation)

While the ordinary commercial risk of carrying on a business is permissible, *shariah* prohibits transactions that rely predominantly on speculation. On the basis of this principle, together with *gharar* above, many conventional derivatives contracts are problematic from an Islamic finance perspective.

iv Qimar (gambling)

In a similar vein to some of the above principles, any transactions which are tantamount to gambling are prohibited under *shariah*.

In addition to complying with the above principles, lenders wishing to be *shariah*-compliant must take care not to invest in certain prohibited (*haram*) products or businesses, such as casinos or drinking establishments.

III ISLAMIC FINANCE STRUCTURES

The primary structures used in Islamic finance transactions represent a way to meet the priorities of investors and entrepreneurs in various circumstances while adhering to Islamic finance principles. These structures are in widespread use among industry participants seeking to be *shariah*-compliant, though there may be nuances according to the jurisdiction and other local considerations.

All of the main Islamic finance structures share common features. These include the sharing of profit and loss among transaction parties (and consequently a preference for equity over debt), and the involvement of real and tangible assets. Because of these features, Islamic finance is used as a form of both asset-backed and asset-based financing.

i Ijarah (lease)

The *ijarah* is typically used in project financings where the asset already exists in some form. It is a type of lease arrangement whereby the lender takes ownership of an asset and leases certain usage rights over it (known as usufruct) to the project company in return for rental payments.

The two types of *ijarah* are the *ijarah wa iqtina*, in which the asset is sold back to the project company either at the end of the term or over the course of the lease period (akin to a finance lease), and an arrangement more akin to an operating lease whereby the lender retains the asset after the lease has ended.

Forward sales are generally prohibited under *shariah* for reasons of uncertainty (*gharar*). However, *shariah* does permit a form of forward lease common in project financings known as *ijarah mawsufa fi al-dhimma*. Under this arrangement rental payments only become due once the project company takes delivery of the asset, which ensures sufficient certainty.

ii Istisnah

The *istisnah* is also commonly found in project financings as well as other contexts. Unlike the *ijarah*, it is more suited to financing an asset that is yet to be built or developed. Under this structure, a contractor undertakes to construct or develop an asset, and in return receives payment from the financier, either in the form of an upfront advance or phased payments over the course of the construction period. On completion, and provided certain specifications are met, the contractor delivers the asset to the financier who sells (or leases) it immediately on to the project company. In practice, this company is often the same entity as or affiliated with the contractor.

iii Murabahah

The *murabahah* is well suited to trade finance scenarios and can be adapted to form a structure that mirrors the effect of a conventional loan without *riba* (the commodity *murabahah*). Under the traditional *murabahah* structure, the financier purchases the asset from a supplier then sells it on immediately to the customer in return for a deferred payment. This deferred payment includes a mark-up reflecting the amount that would be paid as interest under a conventional facility agreement.

iv Mudarabah

The *mudarabah* is suitable for investment ventures in which the financier agrees to have a closer involvement in the project, and is used for *shariah*-compliant investments. It is a joint arrangement in which the financier (known as the *rab-al-mal*) contributes capital and the other party (the *mudarib*) is responsible for carrying out the work, usually for a fee. The parties agree in advance the proportions in which to share any profits between them.

It is worth noting that the *rab-al-mal* is the only party that assumes the risk of losses resulting from the venture, and any attempts to transfer this risk to the *mudarib* are likely to be prohibited under *shariah* principles. A recent example of this is UAE-based issuer Dana Gas, who was arguing that its *mudarabah* should be unenforceable as the risk of losses was improperly mitigated by a guarantee provided to the *rab-al-mal* by the *mudarib*.

v Musharakah

The *musharakah* is seen as the most suitable vehicle for sharing profits and losses in accordance with *shariah* principles. This is because it involves agreeing the proportions in which profits are shared but agreeing that losses are to be distributed to the parties according to the amount of capital each has invested. Control in this arrangement is usually exercised by one of the parties as agreed, though both are entitled do so under the *musharakah* structure.

In a variation of this structure, one party can buy out the interests of the others (for a negotiated fee) over the term of the *musharakah*. This is known as *musharaka muntahiya bittamleek*, or a diminishing *musharakah*.

vi Sukuk

Sukuk are bond-like instruments and are often referred to as such. However, although they mirror the effects of conventional debt securities, they are trust certificates. Under a *sukuk* instrument, one party holds an asset on trust for the *sukuk* holders, and the issuer of the instrument makes predetermined payments to those investors based on the income from the underlying assets. Those payments ensure a regular return and the certificates can be redeemed once they mature. In addition, *sukuk* are in certificated form and can be traded on securities exchanges if listed. Such features mean *sukuk* act in analogous ways to conventional debt-based bonds, while complying with *shariah* principles.

The two main types of *sukuk* structures are asset-backed *sukuk* (where certificate holders hold direct (beneficial) rights in the underlying assets), and asset-based *sukuk* (where investors are only entitled to the cash generated by those assets).

Each of the structures referred to above can also be combined effectively in a project financing context. A common example of this would be using a *mudarabah* or *musharakah* as an investment vehicle to provide capital for the construction of an asset by means of an *istisnah*. An *ijarah* structure could then be used for the leasing of the completed asset to the project company.

IV ISLAMIC PROJECT FINANCE TECHNIQUES

Typically, a large project will require multiple funding sources for both the construction and post-completion phases (a multi-source project), enabling project risk to be spread among a greater number of investors. The need to obtain funding from certain countries may also be driven by geopolitical considerations.

In a *shariah*-compliant financing, such sources might include financial institutions providing facilities analogous to loans, Islamic financial institutions (IFIs) or investors in *sukuk* (transferable financial instruments analogous to bonds), alongside conventional lenders, Export Credit Agencies (ECAs) and bondholders.

Each of these participants has different objectives and requirements. IFIs must ensure a high level of adherence to *shariah* principles, both in how finance is provided and the purpose or purposes for which the funds are used. ECAs, on the other hand, are concerned with the extent to which funds are used to promote exports for the country of origin.

The way in which the financing is arranged must therefore accommodate the needs of each of these funding sources. For example, a separate Islamic facility with separate documentation will cater for the IFI that is prohibited from lending directly to the project company lest any return be considered *riba*. Meanwhile, project *sukuk* might also be used to gain access to a larger pool of investors.

The remainder of this section will examine the Islamic facilities and project *sukuk* financing methods in more detail within the context of a multi-sourced project financing.

i Islamic facilities

The two main types of Islamic facility are *wakala-ijarah* and *istisna'a-ijarah*.² These both enjoy widespread commercial acceptance and tend to be used in combination. Project *sukuk* have also been used in multi-source project financings in the Middle East.³

Wakala-ijarah and istisna'a-ijarah facilities

First, the assets to be financed using Islamic bank facilities are identified, known as the Islamic assets. The construction financing for these Islamic assets only is provided by the *wakala* agreement under the *wakala-ijarah* facility, and the *istisna'a* agreement under the *istisna'a-ijarah* facility. Meanwhile, conventional facilities provide the financing for the rest of the assets in the project.

In a conventional project financing arrangement, the project company will make phased payments upon request to an engineering, procurement and construction (EPC) contractor, known as EPC milestone payments, out of funds received under a bank facility. In an Islamic facility, amounts equivalent to EPC milestone payments are instead provided by the IFI to an Islamic facility agent, which then pays these amounts to the project company. In return, the project company makes rental payments (mirroring the interest under a conventional facility) to the IFI's agent. These will be paid in advance while the Islamic assets are being constructed.

Once the Islamic assets are complete and operational, the IFI leases the right to use the assets to the project company in return for lease payments, under an agreement known as the *ijarah mawsufa fi al dhimma*. Generally, once the lease period expires, the project company takes ownership of the Islamic assets. However, in certain cases, ownership might be transferred gradually to the project company over the course of the lease, for example, in an *istisna'a-ijarah* arrangement.

Governing law and dispute resolution

Islamic facility agreements give rise to particular challenges when it comes to both the governing law to be used and the appropriate jurisdiction for the resolution of disputes. One common preference is for English law to be the governing law in respect of Islamic bank facilities in project financings and for the English courts to resolve disputes arising under them. This is because the English courts have long been prepared to hear disputes arising in other countries provided that the agreements are governed by English law. It also means the parties can rely on an established and consistent case law that does not have multiple interpretations (or *madhabs*) and is used to dealing with issues arising in complex, cross-border financings. The English courts are also seen as generally more favourable to creditors than forums in other jurisdictions.⁴

2 The Shuaibah IWPP project in Saudi Arabia was the first to use the *wakala-ijarah* facility structure in December 2005. It was later used in the Marafiq IWPP located in Jubail, Saudi Arabia (May 2007), the Al Dur IWPP located in Bahrain (June 2009), and the PP11 IPP (June 2010). Examples of the application of *istisna'a-ijarah* structures include the Qatargas 2 LNG project located in Qatar (December 2004), the Rabigh refinery located in Saudi Arabia (March 2006), and the PP11 IPP.

3 The Sadara Integrated Chemical Project located in Saudi Arabia (June 2013) and the SATORP Jubail Export Refinery Project located in Saudi Arabia (June 2010) were both examples of this.

4 Though it has been implemented in various countries such as Saudi Arabia, *shariah* cannot be said to pertain to any particular country. This connection is a requirement of an agreement's governing law under the Convention on the Law Applicable to Contractual Obligations 1980 (the Rome Convention).

However, this approach gives rise to the risk of conflict of laws issues. This is firstly because of the doctrine of *lex situs*, which states that it is the law of the jurisdiction in which an asset is located that should govern the proprietary aspects of that asset. This means that if the project is to finance an asset in one country, then the law of that country may have automatic jurisdiction over the agreements underpinning the project. Moreover, a given agreement may be unenforceable if it is inconsistent with the local country's laws.

A second concern in respect of *shariah*-based provisions is that it may be unclear whether English law or *shariah* principles should prevail in case of a conflict. In approaching this question, it is worth asking whether English judges possess the necessary expertise to decide cases involving Islamic principles, and if they were to do so, which interpretation (or *madhab*) they would apply.

The English courts have customarily approached these issues by ruling that any *shariah*-based elements are part of the commercial content of an agreement, not its legal and justiciable provisions. Therefore, only English law principles will be applied and the parties must satisfy themselves that the document is *shariah*-compliant using other channels.⁵

In practice, this is done by an agreed expert on *shariah* giving a *fatwa* (or ruling) to the above effect, before the parties enter into the agreement. The parties will typically include provisions within the facility agreement acknowledging that each is satisfied that the document in question is fully compliant with *shariah* and that the *fatwa* stating this is legitimate.⁶

Participants in project financings are increasingly opting for Islamic facility documents to be governed by local laws, particular for Middle Eastern projects. This may be owing to the requirements of the local country, the doctrine of *lex situs* as outlined above or the influence of domestic lenders.

Events of default

With multiple financing instruments using a variety of structures and having a variety of objectives, it is important for the project company in multi-source project financings to agree a common terms agreement (CTA) with the financing parties, which sets out the terms that are common to all the instruments in the project. It will then need to be an event of default under the CTA if an event of default occurs under one of the Islamic facility documents. This guarantees that the various facility documents are linked for the purposes of events of default, remedies, revenue and enforcement cash waterfalls, and that the conventional facilities are ranked *pari passu* with the IFIs where this reflects the intention of the parties.

5 See *Shamil Bank of Bahrain v. Beximco Pharmaceuticals Ltd* [2003] 2 All ER (Comm) 849. A recent judgment in the English High Court (*Dana Gas PJSC v. Dana Gas Sukuk Ltd and others* [2017] EWHC 2928) also confirmed that this was the correct approach. The latter case involved a UAE-based issuer called Dana Gas (DG), which argued that its *mudarabah sukuk* should not be enforced on several grounds, including non-compliance of the *sukuk* with *shariah*. DG initially attempted to obtain a judgment in the Sharjah Federal Court of First Instance. However, since it was English law that governed several of the *sukuk* documents, it also successfully applied to the English High Courts for an interim injunction preventing any declaration of event of default or dissolution event from the certificate holders under the *sukuk*. DG partially based its argument for this on the *Ralli Bros* principle, which renders unenforceable any contract governed by English law containing an obligation to take an action in a certain location where doing so in that location would be unlawful. A judgment handed down on 17 November 2017 found DG to be unsuccessful on all grounds.

6 Any *sukuk* prospectus will also include a similar disclaimer from the issuer.

Termination and mandatory prepayment

In a conventional loan facility, the lender accelerates the amounts lent on the occurrence of an event of default, by issuing an enforcement notice and calling in the loan pursuant to the relevant provisions in facility documents. In a *shariah*-compliant arrangement, acceleration occurs by the providers of the Islamic financing requiring a 'termination sum' from the project company. In an *istisna'a-ijarah* facility, this is done by the IFIs exercising a kind of put option known as a purchase undertaking, while in a *wakala-ijarah* facility, they would require the lessee to make a termination sum payment in accordance with the lease agreement.

ii Project sukuk

Under a *sukuk*, the returns payable to the certificate holders are based on the performance of a real asset, which makes it an ideal structure for use in project financings.

One type of structure that is frequently used is the *sukuk al-ijarah*, which is employed in asset-backed and asset-based financings. Under this arrangement, the trust certificates are issued by a special purpose vehicle (SPV), which uses the proceeds to acquire certain assets from the seller (the Islamic assets). The SPV acts as agent and trustee for the *sukuk* holders, who each have a joint and undivided proprietary interest in the Islamic assets (along with the other holders). The Islamic assets are then leased to the project company, which makes rental payments to the SPV in exchange. The amounts paid as rent will include both the price of the assets and a margin as markup, which may be fixed or floating (based on LIBOR). The issuer uses the rental proceeds to make periodic payments to the certificate holders such that each investor obtains a return on their investment on a pro rata basis. At maturity, the project company is required to purchase the Islamic assets from the issuer for an amount equal to the outstanding rental payments. The issuer uses these funds to make a final distribution in redemption of the certificates from the investors.

In a multi-sourced project financing, project *sukuk* are typically asset-based, meaning that the issuer is a senior creditor and is entitled to the monies received from disposal of the assets should investors vote to accelerate upon an event of default, among other sources of funds. Thus, the certificate holders are only entitled to the cash amounts due and payable to the issuer – they do not have a right to take ownership of the underlying assets or sell them to repay debts owing to them under the certificates. It is only when all the finance parties vote for a general acceleration pursuant to an inter-creditor agreement that the issuer, acting on behalf of the certificate holders, has right as a senior creditor to take possession over the secured assets of the project.

Status of the project sukuk

The parties must decide, prior to entering into a project *sukuk*, how the instrument should rank in relation to the other senior facilities. If a *pari passu* arrangement is chosen, there are several issues to consider: whether the periodic distribution amounts should be paid at the same level in the cash flow waterfall; whether the security given by the project company should be shared among different creditors; and what arrangements should be put in place in respect of to inter-creditor voting rights.

Holders of *sukuk* certificates may enjoy rights akin to those granted to investors in conventional bonds issued under Regulation S or Rule 144A of the US Securities Act 1933.

This is the case in respect of certain voting rights such as on specified waivers or the right on an event of default to trigger and vote on enforcement action. Investors in both types of instrument also receive the benefit of incurrence covenants only.⁷

Other matters to consider when structuring and issuing a project sukuk

The following key considerations apply when structuring and issuing a project *sukuk* (most are also relevant to conventional bond issuance).

Given that the distributions made to certificate holders by the issuer may be treated differently for tax purposes depending on the jurisdiction, it is important to choose the place of incorporation for the SPV issuer with this consideration in mind.

If the project *sukuk* are denominated in a different currency to that in which the revenues of the project are generated, this will expose investors to exchange rate fluctuations. The currency of the *sukuk* certificates may therefore need to be the same as the project currency. There may also be local regulations that restrict the currencies that can be used for the project *sukuk*.

The SPV issuer, together with the project company, will need to publish a prospectus and comply with any other applicable capital markets regulations. While this document will in most respects be the same in form and content as prospectuses for conventional listed securities, a project *sukuk* prospectus will also include the *fatwa* attesting to the instrument's compliance with *shariah*. This is typically prepared by the *shariah* supervisory board of the SPV issuer, the project company, or the joint lead managers of the *sukuk*.

More generally, the risk of non-compliance with *shariah* principles should be mitigated to the extent possible, both when it comes to the project *sukuk* and any other Islamic finance arrangements. The importance of this was seen in the recent case of *Dana Gas PJSC v. Dana Gas Sukuk Ltd and others*.⁸ In that case, one party argued that a *mudarabah* agreement governed by UAE law did not comply with key *shariah* principles (following a development in jurisprudence), and that as a result the purchase undertaking agreement based on it (which was governed by English law) should be found to be void on the grounds of mistake. This argument was rejected by the English High Court because there were contractual safeguards that addressed any risk of non-compliance with *shariah* that had been agreed between the parties. In addition, there was a dispute over the location in which the obligations of the contract should be considered to have been performed. The court found that as payments under the purchase undertaking agreement had been made to a London bank, the correct location was not the UAE but England. Neither *shariah* nor UAE law were therefore relevant to whether the agreement was enforceable. The case demonstrates the

⁷ In a possible exception to this, however, the project *sukuk* in two Saudi Arabian projects (the Sadara Integrated Chemicals Project and the SATORP Jubail Export Refinery Project) ranked predominantly *pari passu* in relation to the conventional senior debt. This was done so that the certificates would appeal to Saudi Arabian investors who buy these kinds of securities with a view to holding them for a long period of time. This is for several reasons: firstly, conventional debt securities issued under Rule 144A or Regulation S would not normally have the level of protection afforded by both maintenance and incurrence covenants; secondly, certificate holders would be able to redeem them early whenever any of the senior facilities were subject to a mandatory redemption; and finally, investors would also benefit from the security given in the project financing on a *pari passu* basis with the other senior creditors.

⁸ [2017] EWHC 2928 (Comm).

essential nature of provisions within contracts that deal with non-compliance with *shariah* (for example warranties and representations). The outcome also has a significant bearing on the performance of payment obligations in jurisdictions that are not governed by *shariah*.

V INTEGRATING THE CONVENTIONAL AND ISLAMIC FACILITIES

Any issues that might appear when combining the Islamic structures discussed above with conventional elements of the financing must be addressed and solved as early as possible in the structuring process. Many of those issues and their solutions have been mentioned already in other sections of this chapter. The most important among them are those relating to the relationships between the different finance parties, and in particular the inter-creditor arrangements between IFIs and conventional lenders.

For example, it is essential as an inter-creditor matter to harmonise provisions dealing with events of default and the exercise of remedies between the conventional facilities and the Islamic facilities. No creditor would be willing to accept another being able to accelerate its loan following an event of default under that facility, but not be able to accelerate itself upon occurrence of the same event. After all, though the asset or assets in question may have several very different sets of funding arrangements, it is one project being funded and must be treated as such.

Care must also be taken over the coordination of payments from the project company from its cash waterfall to the creditors, both when it comes to scheduled payments and prepayments (mandatory or voluntary). This depends on the commercial terms that have been agreed, but will be especially important if the IFIs rank *pari passu* with the conventional lenders. In a typical pre-enforcement waterfall under an inter-creditor deed, the IFIs and the senior conventional lenders are entitled to returns in proportion to the level of their investments.

However, some scholars ruling on *shariah* compliance may not allow certain funds to be distributed to conventional lenders, such as sale proceeds from the Islamic assets or rental payments under a lease made prior to the transfer of the asset to the project company.

The Islamic and conventional financing parties must therefore agree the following:

- a* the circumstances under which decisions under the inter-creditor agreement and the common terms agreement (CTA) are to be made jointly between the conventional lenders and the IFIs;
- b* whether an IFI can unilaterally take a decision to accelerate its own facility, with the effect that acceleration is not required to occur under the conventional facilities; and
- c* if the conventional lenders need to be consulted on an acceleration decision, what the voting threshold should be – a lower threshold is advisable since there are usually many more conventional lenders than IFIs, so it may be difficult to obtain sufficient consent.

The extent of the security given by the project company is also a significant consideration when incorporating Islamic finance into a project financing. A key question is whether the scope of the security should be limited to the project company's obligations to the conventional lenders, or whether it should also cover obligations to the IFIs. Finally, since security is usually given over the whole project, it is important to take into account the effect of this on the Islamic assets and any sharing of security among the various creditors, including with the conventional banks.

GOVERNMENT PROCUREMENT

Alexandra Felekis, Mzukisi Kota, Nonkululeko Nojoko, Tina Terblanche and Ntokozo Qwabe¹

I INTRODUCTION

This chapter provides a broad overview of the general principles that underpin most government procurement processes. Section II sets out the general procurement principles that governments commonly apply to procurement processes. Section III deals with localisation, and discusses the tools commonly employed by governments to try and achieve local participation and preference in procurement processes. Section IV deals with the different types of procurement processes used by governments and the types of qualification criteria usually employed in competitive procurement processes.

II GENERAL PROCUREMENT PRINCIPLES

It should be noted that most states will have in place a specific legal framework that either sets out general procurement principles that their governments are bound by when procuring goods and services, or prescribes the precise type of procurement process that must be undertaken. While each state will have its own unique procurement framework, and there is variation in terms of which procurement principles states prioritise, it is possible to discern a broad thread of general procurement principles that usually underlie most procurement processes. We have extracted a list of these procurement principles, and discuss each in turn in this Section. It is important to note that these principles are non-exhaustive, and should not be read in isolation as they are mutually related and reinforcing.

i Fairness

The principle of fairness requires that interested parties must be given sufficient time and a reasonable opportunity to participate in the procurement process. Where a tender process is engaged in, this requires that timely notice of the tender, and a reasonable opportunity to submit bids, should be afforded to interested parties.

Fairness further requires that both in the lead up to and during the procurement process, potential suppliers must be treated fairly and equally in relation to each other. No supplier must be given an unfair advantage as regards the other potential suppliers. All suppliers must, therefore, be provided with the same information and the same opportunity to submit bids, and be evaluated against the same criteria. In broad terms, fairness requires that the procurement process must take into account and balance the interests of all parties, including

¹ Alexandra Felekis and Mzukisi Kota are partners, Tina Terblanche is a senior associate, Nonkululeko Nojoko is a trainee attorney, and Ntokozo Qwabe is a candidate attorney at Webber Wentzel.

but not limited to the interests of the potential suppliers and their business considerations; the interests of government and its obligations and objectives; and the rights of users to services that are of good quality and are efficiently priced.

ii Equitability

Equitability is closely related to fairness, but goes further in that it requires that the procurement process must, in addition to being procedurally fair, also be substantively fair. In some jurisdictions, this principle requires more than mere procedural and substantive fairness, but also embraces the notion of substantive equality. In these jurisdictions, the principle of equitability is put to the transformative task of ensuring that procurement processes are cognisant of historical injustices, and are inclusive of persons who have been disadvantaged by these historical injustices. Measures such as affirmative action and indigenisation in procurement processes are therefore seen, in these jurisdictions, as being important aspects of equitability and fairness, as opposed to being exceptions to them.

iii Transparency

This principle is based on the underlying values of openness and accountability. It is closely related to the principle of fairness in that it requires all information regarding the procurement process and the rules applicable to be widely published and readily accessible. The administrative procedures involved in the procurement process must also be open and accessible, to allow for predictability and ease of cost and risk estimation for potential suppliers.

Transparency often also requires that decision makers in the procurement process give reasons for their decisions and make those decisions available for public scrutiny. This ensures not only that fairness is observed in the decision-making process, but also that decisions are justified, and are not tempered by arbitrary or improper actions.

iv Competitiveness

The principle of competitiveness is strongly linked to the principle of cost-effectiveness, which is discussed below, in that the former should almost always lead to the latter. Competitiveness implies the participation of two or more parties, who put their best offer forward and compete against each other for the procurement contract – thereby allowing the state to shop around for the most suitably priced and cost-efficient offer, considering its budget. By giving the state a basket of alternative offers to choose from, the requirement of competitiveness ensures that the state attains the best value for its money. This is perhaps the main reason, among others, that the principle of competitiveness is often emphasised in states with limited fiscal resources.

The most common competitive process employed by states is that of tendering, where the relevant organ of state will issue an invitation to tender that is open to the public. We discuss open tendering procurement processes in Section IV of this chapter.

v Cost-effectiveness

Some aspects of this principle have already been touched on in the discussion on competitiveness and do not bear repeating here. Ultimately, this principle entails, when procuring goods or

services, seeking to attain the best value for money, while not compromising quality and delivery. Broadly speaking, therefore, this principle is about ensuring that states engage in efficient public finance management in their procurement practices.

vi Long-term sustainability

This principle takes cognisance of the fact that governments often procure for the long-term provision of services, which often involves the development of new infrastructure, and that this needs to be done in a sustainable manner. In particular, the principle emphasises that the efficient and cost-effective provision of quality services to users requires ongoing maintenance of infrastructure for sustained periods. Further, the principle has recently become important in the light of the growing global commitment to environmental sustainability, and the idea that the development of infrastructure and the provision of services in an environmentally damaging manner is futile and unsustainable as it is, if unchecked, ultimately destructive of the human species.

A practical outworking of this principle may be criteria relating to adherence with, for example, the Equator Principles.²

vii Other common principles

As indicated above, the list of general procurement principles is not exhaustive, and many general principles other than the ones already discussed frequently appear in the procurement laws and processes of different states. We mention some of these and what they broadly entail briefly here. The principle of integrity often appears in state procurement frameworks, particularly in relation to unsolicited proposals (which we discuss in Section IV), and to selection processes generally. This principle entrenches the values of honesty and freedom from external interference in the decision-making process. This is particularly common and important in states where the laws relating to administrative justice do not clearly cover these issues.

Other jurisdictions refer to principles of economy and efficiency. These two principles, together, concern the need for competition and the making of decisions within a reasonable time and with minimal administrative burdens. They are basically synonymous with the principles of competitiveness and cost-effectiveness.

III LOCALISATION

States often make provision for the preferential treatment of domestic entities participating in procurement processes, or make special provision for bidders that undertake to use national goods or employ local labour (or both). While these regimes are not monolithic, and their precise content and extent often depends on the history, and developmental and economic priorities of the particular state, it is possible to group the types of preferential regimes into

2 The Equator Principles (EPs) are a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects and are primarily intended to provide a minimum standard for due diligence and monitoring to support responsible risk decision-making. The EPs apply globally, to all industry sectors and have been adopted by 96 financial institutions in 37 countries, covering the majority of international project finance debt within developed and emerging markets.

some broad categories. In this Section, we provide an overview of preferential procurement, and then consider the broad categories that instances of preferential procurement usually fall into.

i General discussion on preferential procurement

As discussed above, preferential procurement in favour of local entities can take place in multiple ways. It can be in the form of domestic procurement, where the procurement process is limited to domestic suppliers or contractors (as discussed below). Owing to the fact that domestic preferences are sometimes not permitted under the guidelines of some international financial institutions, and may in some cases be inconsistent with states' international obligations pursuant to regional economic integration or trade facilitation agreements, the blanket exclusion of foreign entities is sometimes neither possible nor viable. States are also usually dissuaded from blanket foreign exclusion by the reality that such exclusion may cause lower levels of competitiveness and cost-effectiveness.

The most common way in which states ensure domestic participation (while having the advantage of international competition) is through requiring a minimum percentage of national participation as a prerequisite for qualification at the elementary request for proposal (RFP) stage. This is particularly common in large projects where procurement opportunities are to be pursued via consortia.

ii Promoting inclusivity and addressing structural disadvantage

In some states, preferential procurement provisions are a constitutional obligation aimed at addressing structural disadvantage caused by historical injustices, and promoting inclusivity in previously exclusionary economies. Thus, where people have been structurally excluded from economic participation on the basis of race, gender, disability and many other grounds, preferential procurement is seen as a fundamental part of ensuring the empowerment of those previously excluded persons and their integration into the national economy. This is sometimes pursued through a point system where bidders are awarded preference points for complying with empowerment targets as regards the inclusion of the identified categories of previously disadvantaged persons in the bidders' structures (through ownership, management, subcontracting or otherwise). Those targets are often set out in the state's empowerment legislation or in the procurement documentation (e.g., the RFP).

As mentioned earlier, in the states in which preferential procurement provisions are deployed to address structural disadvantage caused by historical injustices, those provisions are seen as important aspects of the principles of fairness and equitability rather than contrary thereto, as the integration of excluded persons into the procurement economy in those states is seen not as an infringement of fairness and equitability but as promoting those principles.

iii State participation

In some states, preferential procurement takes the form of provisions that prescribe the involvement of state-owned entities in the procurement. This is often done through requiring bidders to set aside a stipulated percentage of equity for state-owned entities or awarding preferential points for bidders who display evidence of such equity provision, or both. In addition to ensuring local participation in the procurement process, these kinds of preferential procurement provisions are seen as central to ensuring that procurement takes place within broader government objectives to facilitate national planning and coordination, and to drive the direction of the relevant state's economic development.

iv Local community participation

Local community participation is generally seen as important in a lot of procurement processes because communities are the end users of the services in respect of which procurement takes place. At its lowest, local community participation is ensured through the general requirement that procurement processes be available for public scrutiny and comment, as discussed in Section II. At a moderate level, states often apply socio-economic policies that require suppliers or contractors to employ local community labour or materials, and which include strict corporate social responsibility measures towards the local community as part of qualification criteria. At the most onerous end of the scale, local community participation can be required in the form of free-carry equity participation in the project in question.

v Socio-economic development and job creation

The projects being procured will often have, as an aim, improving the lives of communities, or the delivery of services, or both. Consequently, it is often the case that states pursue procurement as part of a broader socio-economic development plan. It is not uncommon, therefore, for states to require bidders to identify the needs of surrounding communities where the project site will be located, and to formulate strategies on how such needs could be met, as part of their proposals. Further, bidders are sometimes required to show how much of their resources, in revenue percentage, they aim to dedicate to contributing to the socio-economic development of the local community or communities. In addition to job creation, this could include investing in local small business enterprises and other development measures aimed at uplifting the local community.

vi Domestic suppliers or contractors, and domestically produced goods

As already mentioned, preferential procurement provisions can sometimes be as stringent as to limit procurement processes to domestic suppliers or contractors. This is not uncommon in contexts where the value of the subject matter of the procurement is relatively low or the goods or services concerned are commoditised and readily available locally. As discussed above, however, the blanket exclusion of foreign entities is often otherwise impermissible or undesirable. The common way to impose national participation in these circumstances is through a requirement that bidders will, in addition to using domestic suppliers for their services, use domestically produced goods.

To allow states to impose the use of domestic suppliers and domestically produced goods, the margin of preference is often invoked, which refers to special evaluation criteria establishing margins of preference for national bidders or bidders who offer to procure supplies, services and products in the local market.

IV PROCUREMENT PROCESSES AND QUALIFICATION CRITERIA

The Sections above identify the principles that generally inform government procurement processes, including both the philosophical basis for public procurement processes and the specific policy considerations. Against this backdrop, Section IV will set out a high-level description of the different types of procurement processes that would typically be utilised by the state in a project finance context.

i Competitive bids

The value and complexity of the services or goods being procured and the skills required by the bidder will often determine the procurement method used by a government. If the transaction value of a project is equal to or exceeds a legislated threshold, a public tender process or open tender will be used. Owing to the high capital cost of the projects that are project financed, a competitive process is usually utilised by the procuring authority. Open tenders are invitations to the greater public to tender for the goods or services. This form of procurement is also most likely to align with the procurement principles, outlined in Section II.

Under a competitive procurement process, the procuring entity has two options, it can either employ a two- or one-stage approach. The two-stage approach encompasses the procuring entity carrying out a pre-qualification exercise in terms of which it will issue a request for qualification (RFQ), which will be followed by an RFP. In a two-stage bidding process the RFQ and RFP are two integral parts, whereas, in a single-stage bidding process, there is only one part, the RFP, in the bidding process.

The objective of the RFQ is to select a limited number of bidders that are qualified based on their technical experience, credentials and, often, their level of localisation. The bidders must be able to prove that they have sufficient experience and commitment to prepare the proposal and execute the project. Only pre-qualified bidders are permitted to respond to the RFP in the second stage.

The objective of this pre-qualification is to narrow down the field to a select few serious bidders capable of implementing such a project. This approach can save the procuring entity time and money as it only evaluates a limited number of detailed bid responses at RFP stage.

The procuring entity will establish a minimum qualifying technical and financial capability criteria to evaluate the bidders and determine the shortlist of bidders that are pre-qualified. Minimum qualifying technical experience criteria test the experience and suitability of the bidder in undertaking the project and usually require the bidder to prove its experience in similar projects, track record in project implementation, technical skills, manpower and operating experience.

Minimum qualifying financial parameters usually test the net worth and turnover of the sponsors, the profitability of the project, and the bidder's track record of successful and sizeable fundraisings equivalent to the total project cost of the project. These criteria help judge the ability of the bidder to raise the finances required for the project.

Some RFQs have 'must meet criteria', which essentially means that the bidder must meet the functionality threshold and a failure to do so immediately disqualifies them from further evaluation. As set out in Section II above, these criteria usually centre around preferential procurement. In other instances, the procuring entity will allow minor deviations that do not materially undermine the substance of the bid.

Depending on how the criteria are formulated, there is sometimes a risk that there may only be one or two qualifying bidders and this decreases the chances of a competitive bidding process at RFP stage and may result in the need for a second pre-qualification exercise.

In more complex or innovative projects, the pre-qualified bidders may also be involved in assisting the procuring entity with the RFP. The procuring entity would share the draft RFP and allow the pre-qualified bidders to give oral and written feedback on the RFP. To ensure maximum benefit from this process, the interaction with pre-qualified bidders must be well structured so that each pre-qualified bidder is treated equally and the confidentiality of the bidders must not be compromised.

An RFP will usually set out the bid conditions, technical threshold criteria and evaluation criteria. The procuring entity should provide all the information necessary to enable the bidders to submit a bid that meets the criteria. Against the background of the procurement principles, the procuring entity should not use valuation methods that could potentially limit competition or prejudice bidders.

Different states will use different evaluation systems depending on their public procurement regulations or legislation. The evaluation methodology of the procuring entity should be clearly disclosed to all the bidders in the RFP.

The qualification criteria in the RFP can broadly be divided into the following categories: administrative responsiveness; technical qualification criteria; and price or localisation (discussed in detail above), or both. Save for administrative responsiveness, which is usually evaluated on a pass-or-fail basis, each criterion is given a weighting according to its relative importance. The weighting determines a bidder's overall score. It is important that the RFP clearly discloses the weighting attached to each category of criteria and the allocation of points related to each criterion. A ranking is usually obtained by cumulating the scores on the technical criteria evaluation (which includes financial criteria) and the price bid. Alternatively, the ranking can also be based solely on the best price bid among bidders that have achieved a minimum threshold score on technical and financial parameters. This selection procedure should be specified upfront in the RFP and will be known to all the bidders before bid submission.

ii Administrative responsiveness

It is essential for a proposal to meet certain minimum requirements. The satisfaction of these requirements constitutes what is often referred to as a 'compliant bid'. Bids that fail to meet the minimum requirements will be rejected and will not be subject to further evaluation. However, these requirements should not stand in the way of innovative ideas and projects and should not be unnecessarily onerous. Examples of these minimum requirements would be whether the bid is in the correct form, all returnable documents have been enclosed, the bidder has accepted the bid validity period, the bidder has provided a tax clearance certificate, etc.

iii Technical qualification criteria

In the technical section of the RFP, the bidder's proposal will be evaluated against all factors that are relevant to the project. Technical evaluation is an evaluation of the technical, operational, environmental and financial viability of the bidder's proposal in terms of the specifications prescribed in the RFP. These criteria should be objective and clearly quantifiable to ensure that proposals can be evaluated objectively. These are some of the factors that are generally looked at when evaluating the technical aspects of the bid:

- a* Qualifications: If a one-stage evaluation approach was followed and there was no RFQ stage, the procuring entity will test that the bidders are qualified and have sufficient experience.
- b* Legal: bidders will be required to confirm the composition of the bidder and their commitment to the project by the submission of a consortium agreement or shareholders' agreement. The bidders will be required to either confirm their acceptance of the terms of certain non-negotiable project agreements to be entered into with the procuring authority or submit a mark-up of the project agreements disclosing the risk allocation that they are not willing to accept along with an explanation for the mark-up.

- c* Technical soundness: the minimum engineering design and conformance with the performance specifications or standards set in the RFP.
- d* Operational feasibility: the proposed methods and procedures for operating and maintaining the proposed project.
- e* Quality of service: the manner in which the bidder proposes to maintain and expand their services, including any performance guarantees to secure proper performance.
- f* Land and environmental considerations: If the bidder is responsible for procuring and securing the project site for the term of the agreement with the procuring authority, proof that the bidder has obtained secured rights to the project site and the relevant environmental consents relating to the project or that it has made the requisite applications.
- g* Enhancements or innovation: this includes any extras that the bidder may propose to make their proposal more attractive, such as profit-sharing with the government, the exclusion of government guarantees, lower levels of government support, etc.
- b* Promoting inclusivity: any benefits for local business, domestic investment and the encouragement of employment in the jurisdiction of the procuring authority.

The second leg of the technical evaluation focuses on financial and commercial considerations. This is a more complex evaluation and requires a complete understanding of the project costs, funding and value for money. The following criteria are usually considered:

- a* affordability;
- b* certainty of the project costs;
- c* certainty, nature and costs of funding;
- d* equity participants and funding structure;
- e* preparation of a financial model based on parameters provided in the RFP;
- f* value for money; and
- g* project bankability.

iv Price

In some jurisdictions the evaluation of price is a separate element in the assessment of the bid that is carried out only if the bidder has met the threshold point allocation in respect of the technical qualification criteria. However, the price being offered by the bidder will be scrutinised alongside the financial considerations discussed above.

v Evaluating the bids

An evaluation committee will usually be established to evaluate and adjudicate the bids and thereafter award the tender to the highest ranking bidder. If the determining criterion is based on the price, the successful bidder will be the one with the lowest price. If the criterion is based on the price and other requirements, such as localisation, the successful bidder will be the one that has the highest combined score for these aspects.

On very complicated projects, a procuring entity may seek to hold the second-ranked bidder in reserve in case the preferred bidder is unable to achieve financial close.

If there is no clear winner after the evaluation of the bids, the procurement may have to go into a best and final offer (BAFO) process. The main reasons that the bidding process may be extended and a BAFO process conducted would be that there is a minimal difference in the score of the highest ranking bidders, the bids are identical or too similar to choose from, or no single bid meets the procuring entity's prescribed objectives.

Well-structured and communicated RFPs should not require a BAFO. Bidders should not assume that there will be a BAFO stage and should not use BAFO to complete incomplete bids.

There can be variations to the typical structure of an open-tender process. For example, reverse auctions, where the procuring entity sets the price that it will pay for the good or service that is being procured and all the bidders that are able to develop the project based on that price are eligible to be selected subject to certain gatekeeper criteria.

vi Unsolicited proposals

Unsolicited proposals are a deviation from an open procurement process and involve direct negotiation by the procuring entity with a proponent for the provision of goods or services without the proponent being selected through an open-tender process. This mechanism of procurement is not used often as it undermines the principles of transparency and fairness.

In most jurisdictions the requirements for unsolicited proposals are much more stringent compared to other procurement methods. States would generally consider such bids if they are innovative, have a clear business case and the proponent can prove that the project is feasible.

In addition, an unsolicited proposal will usually have to satisfy the below criteria:

- a* the product or service is unique; and
- b* the product or service must be exceptionally beneficial to, or have a cost advantage for the state; or
- c* the service provider must be the sole provider for the product or service required by the state; or
- d* the need for the service or product is urgent or there is an emergency (this would usually mean that an event has occurred where there is a need for the goods, services or works, it would be impracticable to use other methods of procurement, and the circumstances that give rise to this event were not foreseeable or due to the fault of the procuring entity).

Notwithstanding the above, governments may still require that the proponent prepare bid documentation to be tested in the market to ensure that there is no other service provider or entity that is able to provide the product or service, essentially to try to ensure that the procurement principles are maintained.

ABOUT THE AUTHORS

MATEO TODD ACEVES

Kirkland & Ellis LLP

Mateo Aceves is a corporate associate in Kirkland's Chicago office. His practice focuses on complex business transactions, including mergers and acquisitions, project and infrastructure development, debt financings and general corporate counselling. Mateo acted for lenders and lead arrangers on the financing of the 644MW Bayonne Energy Center gas-fired power project in New Jersey and for Cheniere Energy on the development of its Corpus Christi liquefaction facility, including reaching a positive final investment decision in connection with its Train 3 project expansion, the issuance of US\$1.5 billion in senior secured notes, and the amendment and restatement of its US\$8.5 billion credit facilities. He has also represented the 'YieldCos' of SunEdison on their US\$2.5 billion sale and sponsorship transaction with Brookfield Renewable Partners and a US\$1 billion family office on its tax-equity investments in various renewable energy projects. Mateo received a JD with honours from the University of Chicago Law School and a BA *summa cum laude* from Brandeis University.

IGNACIO ÁLVAREZ

Uría Menéndez Abogados, SLP

Ignacio Álvarez is a lawyer in the Madrid office of Uría Menéndez. Ignacio joined the firm in 2010. Between January and July 2016, he was seconded to the London office of the US firm Shearman & Sterling LLP, where he worked in the capital markets group as an international associate.

Ignacio's practice is focused on financing and debt restructuring transactions, M&A and energy law. He has been involved in transactions involving the sale of non-strategic assets of financial institutions, such as non-performing loans, real estate assets and asset management platforms.

Some of Ignacio's recent highlights include advising international investors on the acquisition of solar PV portfolios, and the disposal of, and investments in, gas distribution companies, as well as advising sponsors on the execution and restructuring of renewable energy project financings.

DAVID ARMSTRONG

Skadden, Arps, Slate, Meagher & Flom LLP

David Armstrong is a partner in Skadden's banking and energy and infrastructure projects group. His practice focuses primarily on the representation of commercial and investment banks, as well as borrowers and issuers, in leveraged and other finance transactions, including project financings, acquisition financings, leveraged leases and other senior secured lending transactions, with a principal focus on the energy and industrial sectors.

DAVID F ASMUS

Sidley Austin LLP

David F Asmus, co-leader of Sidley's energy practice, is an industry leader in the structuring and implementation of oil and gas development projects and project financings, as well as acquisitions and divestitures. He has handled some of the world's most challenging and innovative projects in these fields. His experience ranges from shale and other unconventional resources, to deep water offshore developments, and from liquefied natural gas to petrochemicals and refining.

He has been ranked in *Chambers USA: America's Leading Lawyers for Business* (2003–2018) and *Chambers Global: The World's Leading Lawyers for Business* (2000–2019) and is *Chambers'* only star-rated individual in the oil and gas field in the United States. Dave was selected as 'Energy Lawyer of the Year' (2015–2017) and 'International Lawyer of the Year' (2005, 2008, 2012–2014) by *Who's Who's Legal*. He was also named an 'Energy and Environmental Trailblazer' by *The National Law Journal* and named '2014 Houston Lawyer of the Year – Natural Resources Law' by *The Best Lawyers in America*. Dave has been listed in *The Best Lawyers in America* (2006–2011, 2014–2017) and as 'Texas Super Lawyer' (2004–2017) and 'Top 100 Houston Super Lawyers' (2007) by Law & Politics. Lawdragon named him one of America's 500 Leading Lawyers (2005–2007, 2011, 2015).

Dave has served as past president, secretary and member of the board of directors of the Association of International Petroleum Negotiators (AIPN), and also served as chair of the Institute of Energy Law and the Oil and Gas Committee of the International Bar Association.

Before entering the legal field, Dave started his career at an independent oil company as a geophysicist.

ANA CAROLINA BARRETTO

Veirano Advogados

Ana Carolina Barretto leads the projects practice at Veirano Advogados in São Paulo, Brazil. She specialises in project finance and infrastructure development, and has significant expertise in the infrastructure and natural resources industries. Ana is widely recognised by international publications such as *Chambers Global* and *Chambers Latin America*, *The Legal 500*, *IFLR 1000*, *LatinLawyer 250*, *Euromoney Expert Guides* and *Who's Who Legal* as a leading lawyer for project development and finance, energy and construction law. She holds a law degree from the Pontifical Catholic University of Rio de Janeiro, a Magister Juris and a Master in Legal Studies degree from the University of Oxford, where she was a Chevening scholar.

PALLAVI BEDI

L&L Partners

Pallavi Bedi is a partner at the firm and specialises in the area of projects and project finance. She focuses on power (including renewable energy), oil and gas (including liquefied natural gas), mining and project financing. In addition, she has also been involved with other infrastructure projects such as airports and urban infrastructure. She has advised domestic and international borrowers and lenders on multiple project finance deals. In addition, she advises clients on concession agreements, gas sale and purchase agreements, power purchase agreements, offtake agreements, engineering, procurement and commissioning contracts, and operations and maintenance contracts in relation to diverse projects.

BRIAN A BRADSHAW

Sidley Austin LLP

Brian Bradshaw is a partner in Sidley's Houston office. His practice focuses on project development and finance, corporate finance, and mergers and acquisitions involving oil and gas, power and liquefied natural gas (LNG). His experience in domestic and international matters include every stage of the development, construction and financing of upstream, midstream and downstream projects as well as conventional and renewable power projects. Brian has advised clients on a wide range of projects including liquefaction, regasification, refineries, petrochemical plants, natural gas and liquids pipelines, upstream development, floating production storage and offloading units, floating storage regasification units and all related supply and offtake arrangements for gas, power, LNG, crude oil, refined products and coal. In the power industry, Brian has advised on both fossil fuel plants and alternative energy power plants, including, hydro, solar, wind and nuclear, as well as transmission lines. He also advises clients on shipping and maritime-related issues and engineering, procurement and construction contracts.

AMANDA LEAL BRASIL

Veirano Advogados

Amanda Leal Brasil is a projects associate at Veirano Advogados in São Paulo, Brazil specialising in corporate law, project finance and infrastructure development. She holds a law degree from the Pontifical Catholic University of Rio de Janeiro.

SCOTT COCKERHAM

Kirkland & Ellis LLP

Scott Cockerham is a tax partner in Kirkland's Washington, DC, office. Scott focuses on providing tax and commercial advice in relation to the development, financing, purchase, and sale of energy and infrastructure projects. He regularly advises clients on the tax aspects of the development and financing of investments across the renewable energy sector. He works for a broad range of clients in transactions involving solar, wind, geothermal, fuel cell and biomass projects. He received his LLM from New York University School of Law, and JD and BA from the University of Arizona.

BORJA CONTRERAS

Uría Menéndez Abogados, SLP

Borja Contreras joined Uría Menéndez in 2011. He was appointed senior associate in 2018. Between September 2017 and June 2018, Borja worked in the New York office of Paul, Weiss, Rifkind, Wharton & Garrison LLP, where he was a visiting lawyer in the finance team.

He has over eight years experience advising lenders and borrowers on corporate, acquisition and project finance. He has also advised creditors and debtors on restructuring the debt of some of Spain's biggest companies.

Since 2011, he has also participated in several sales and acquisitions of non-strategic assets of financial institutions, such as non-performing loans and real estate assets.

ADAM COWAN

Sidley Austin LLP

Adam Cowan is a counsel in Sidley's Houston office. His practice focuses on project development and finance, corporate finance, and mergers and acquisitions in the power, oil and gas, renewables, transport and infrastructure sectors. Adam has extensive experience advising sponsors, developers, funds and financial institutions (including export credit agencies, development and multilateral financial institutions, and commercial lenders) on a wide range of international energy and infrastructure transactions, including acquisitions, investments, joint ventures, project development and financings. He has particular experience of working in emerging markets, especially in Latin America and Africa.

Adam has lived and worked in France, Spain and Chile, and speaks both French and Spanish.

BEN FARNSWORTH

Allens

Ben Farnsworth advises on Australian and offshore project financings across the mining, oil and gas, economic infrastructure, and power and water sectors, as well as PPP transactions. His experience includes the project financing of Eastern Goldfield's Davyhurst Gold Project and Millennium Minerals' Nullagine Gold Project expansion; the US\$20 billion Ichthys and A\$8.5 billion Australia Pacific liquefied natural gas projects; and the financings of the Runruno Gold Mine project financing in the Philippines and the Wetar Copper Project in Indonesia.

ALEXANDRA FELEKIS

Webber Wentzel

Alexandra focuses on project finance and infrastructure finance, particularly as it relates to concessions, procurement programmes, public-private partnerships and financings in the mining and energy sectors. She has been involved with the South African government's renewable energy independent power producers procurement programme and has advised the South African government in respect of its gas independent power producers procurement programme. Alexandra has also advised Transnet, South Africa's rail, port and pipeline company, in respect of various concessions.

RICHARD M FILOSA

Morgan, Lewis & Bockius LLP

Richard Filosa is the deputy practice group leader for the Morgan Lewis project finance and infrastructure practice. He advises clients on the development, construction, project financing, and transfer of electric generating facilities and other infrastructure projects. He counsels developers, investors, sponsors, financial institutions, and contractors through US and international infrastructure project finance ventures. He works with clients on every phase of project development and financing, from initial project structuring, development and permitting, to the negotiation and closing of construction and permanent financing arrangements. Richard also advises clients on mergers and acquisitions involving power production facilities and portfolios of power production assets. In connection with his project development and project financing work, he advises clients on engineering, procurement, and construction contracts, equipment purchase agreements, operations and maintenance agreements, long-term service agreements, fuel supply contracts, power purchase contracts, and construction and permanent financing arrangements. Richard brings his engineering background to his work with clients. In his previous career, he worked as an environmental engineer for the US Environmental Protection Agency (EPA). Before that, he was an engineer with Stone & Webster Engineering Corporation, providing engineering and management support for various industrial, municipal, infrastructure and power projects.

ANIA GORNA

Norton Rose Fulbright

Ania Gorna is a banking lawyer at Norton Rose Fulbright in Amsterdam. She has more than 10 years of experience in a broad range of finance transactions, with a focus on project finance.

She advises on international and domestic transactions, acting for both lenders and sponsors. She regularly advises on road and accommodation projects, as well as on energy projects and is recognised in legal directories including *Chambers Global* (2018 edition, foreign expert, banking and finance (The Netherlands)) and *The Legal 500 EMEA* (2017 edition next generation lawyer, project finance and PFI).

Ania joined the Amsterdam banking and finance team in 2011, having worked in the banking and finance team at Norton Rose Fulbright in Johannesburg since 2007, and is admitted to practise in England and Wales as well as South Africa.

BRIAN GREENE

Kirkland & Ellis LLP

Brian Greene is a partner in Kirkland's Washington, DC, office. Brian's practice includes representing private equity investors, lenders and sponsors in a broad range of project finance, acquisition finance, project development and restructuring matters in the power sector and in both the United States and Latin America. He has experience with renewable energy projects dating back to 2006 and has seen the sector develop through extensions of the investment tax credit and the PTC, the Recovery and Reinvestment Act of 2009, and the dramatic reduction of costs and the emergence of new technologies over the past decade. Brian has particular expertise with solar projects, having worked on numerous financings for utility scale, commercial industrial and residential solar projects over his career. He was

recognised as a rising Star for project finance in 2017 by Law 360 and a LMG rising star by Euromoney PLC for project finance in 2015 and 2016. He received his JD from the University of Michigan Law School and a BA *cum laude* from Princeton University.

GREGORY HOWLING

Skadden, Arps, Slate, Meagher & Flom LLP

Gregory Howling is an associate in Skadden's energy and infrastructure projects group. He focuses his practice on financings, joint ventures and strategic alliances, and mergers and acquisitions involving energy and infrastructure projects, including both renewable energy and oil and gas transactions. He also counsels international oil companies on structuring and negotiating oil and gas rights agreements with sovereign states and national oil companies.

MUNIB HUSSAIN

Milbank, Tweed, Hadley & McCloy LLP

Munib Hussain is a senior associate in the London and Tokyo offices of Milbank, and a member of the firm's global projects, energy and infrastructure finance group and Islamic finance business unit. Munib has advised both lenders and sponsors on a number of international projects, energy and infrastructure financings, specialising in multi-sourced financings involving export credit agencies (ECAs), multilaterals, Islamic banks and *sukuk* holders. As a member of Milbank's Islamic finance business unit, Munib has advised the joint lead managers of the US\$2 billion project *sukuk* on the Sadara Integrated Chemicals Project; advised the joint lead managers on the US\$1.25 billion *sukuk* issued by PETRONAS; advised the lenders on the petrochemicals expansion of the PetroRabigh combined refinery and petrochemicals facility; advised the unsecured creditors committee of Arcapita Bank BSC in relation to the issuance of a US\$550 million *sukuk*; and represented the project company on the US\$1 billion *murabahah* facility on the QSTec polysilicon project. Munib is recognised as an expert for Islamic finance in *Who's Who Legal 100*.

MZUKISI KOTA

Webber Wentzel

Mzukisi regularly advises on complex energy and infrastructure projects and has particular expertise in a number of industries, including electricity, gas, petroleum, ports, rail, education and gambling. He helps clients with, amongst others things, the review of public decision-making, public procurement, legislative drafting, and constitutional and administrative law.

RAJIV LUTHRA

L&L Partners

Rajiv Luthra has over three decades of experience as a trusted adviser to the Indian government, and top domestic and international corporations. He has advised the government of India in connection with a number of WTO disputes, as well as assisted several of its ministries in the drafting and review of policies and legislation. Rajiv has taken his firm from being a sole practitioner firm to being one of India's pre-eminent top-tier corporate law firms. The firm was ranked as the global leader in project finance and public-private partnership and has been

recognised as the no. 1 law firm in the world for global PFI and PPP deals by Dealogic. He has been closely involved with the development of project finance and public-private partnership models in India and has advised on infrastructure projects worth over US\$100 billion.

BARRY N MACHLIN

Mayer Brown LLP

Barry Machlin is a partner in Mayer Brown's global projects group and concentrates on international and domestic project finance and infrastructure transactions of all types. Barry has led or had a central role in transactions involving more than 60 countries spanning a wide range of sectors, including power (coal, gas, wind and nuclear), oil and gas (pipelines, petrochemical and other facilities), ports and aviation, satellite and telecom, and other areas. He has represented sovereigns, state-owned enterprises and investors in privatisation matters and cross-border investment and financing transactions. He has acted for, or had major roles in transactions involving, more than 20 ECAs, IFIS, DFIs and PRI providers. He served for four years on the firm's global partnership board, and is a former co-chair of the global projects group. He is currently a member of the firm's Asia board. Barry has consistently been ranked in band 1 by *Chambers USA* (Projects) and is highly ranked in both the *Chambers Global* and *Chambers Latin America*, as well as named a 'Leading Lawyer' in the *Legal 500 United States*. Barry was named project finance 'Dealmaker of the Year' by the *American Lawyer* for his leading role in the Panama Canal expansion project.

NONKULULEKO NOJOKO

Webber Wentzel

Nonkululeko focuses on project financing and project development. She has experience in drafting the commercial agreements for such transactions and a significant amount of her work relates to renewable energy projects.

NTOKOZO QWABE

Webber Wentzel

Ntokozo Qwabe is a candidate attorney in the public law team at Webber Wentzel, and has assisted in advising on a range of procurement and regulatory matters, and focuses on all aspects of general constitutional and administrative law. Ntokozo has also done a rotation in the private equity corporate team, where he was exposed to typical local and cross-border private equity transactions across sub-Saharan Africa.

KELANN STIRLING

Kirkland & Ellis LLP

Kelann Stirling is a partner in Kirkland's New York office. Kelann has represented developers, sponsors, lenders (including commercial banks and ECAs) and government entities in connection with financings of conventional and renewable power, oil and gas, LNG and infrastructure projects. She has experience in all aspects of structuring international and domestic project financings, and negotiating and drafting finance and project development documents. In addition, Kelann has significant experience in acquisition financings in the energy sector and US renewable energy tax-equity financings. From 2014 to 2016, Kelann

was a director and corporate counsel at InterGen Services, Inc, an IPP based in Burlington, MA that operated power plants in the UK, the Netherlands, Mexico and Australia. During 2004 to 2005, she was a judicial clerk for Judge Richard A Cardamone, United States Court of Appeals for the Second Circuit. Kelann received her JD *magna cum laude* from Cornell Law School and her BS *magna cum laude* from Boston University.

TINA TERBLANCHE

Webber Wentzel

Tina focuses predominantly on the limits of state powers and the interpretation of statutory provisions granting powers to organs of state. She has drafted opinions on the power and authority of organs of state and state officials in all spheres of government, including municipalities, regulatory authorities and state-owned entities. She has often advised on the lawfulness of procurement procedures and has experience in judicial review proceedings in the High Court of administrative action, especially challenges of tender awards.

ROBERT WARFIELD

Skadden, Arps, Slate, Meagher & Flom LLP

Robert Warfield is an associate in Skadden's energy and infrastructure projects group. He represents clients in transactions related to the development, financing, acquisition, and sale of energy and infrastructure projects. His representations involve transactions spread across a wide range of energy and infrastructure projects, including solar, wind, LNG, natural gas, power sales, petrochemicals and biomass.

Appendix 2

CONTRIBUTORS' CONTACT DETAILS

ALLENS

Level 37, QV1 Building,
250 St Georges Terrace
Perth WA 6000
Australia
Tel: +61 8 9488 3700
Fax: +61 8 9488 3701
ben.farnsworth@allens.com.au
www.allens.com.au

KIRKLAND & ELLIS LLP

601 Lexington Avenue
New York, NY 10022
United States
Tel: +1 212-446-4800
kelann.stirling@kirkland.com

1301 Pennsylvania Avenue, NW
Washington, DC 20004
United States
Tel: +1 202 389 5000
scott.cockerham@kirkland.com
brian.greene@kirkland.com

300 North LaSalle
Chicago, IL 60654
United States
Tel: +1 312 862 2000
mateo.aceves@kirkland.com

www.kirkland.com

L&L PARTNERS

1st & 9th Floors, Ashoka Estate
Barakhamba Road
New Delhi 110 001
India
Tel: +91 11 4121 5100
Fax: +91 11 2372 3909
rajiv@luthra.com
pbedi@luthra.com
www.luthra.com

MAYER BROWN LLP

71 S Wacker Dr
Chicago, IL 60606
United States
Tel: +1 312 782 0600
Fax: +1 312 701 7711
bmachlin@mayerbrown.com
www.mayerbrown.com

MILBANK, TWEED, HADLEY & McCLOY LLP

10 Gresham Street
London
EC2V 7JD
United Kingdom
Tel: +44 20 7615 3013
Fax: +44 20 7615 3100
mhussain@milbank.com
www.milbank.com

**MORGAN, LEWIS &
BOCKIUS LLP**

One Federal Street
Boston, MA 02110-1726
United States
Tel: +1 617 341 7770
Fax: +1 617 341 7701
richard.filosa@morganlewis.com
www.morganlewis.com

URÍA MENÉNDEZ ABOGADOS, SLP

Príncipe de Vergara, 187
Plaza de Rodrigo Uría
Madrid, 28002
Spain
Tel: +34 91 586 04 49/05 48
borja.contreras@uria.com
ignacio.alvarez@uria.com
www.uria.com

NORTON ROSE FULBRIGHT LLP

24th floor, Rembrandt Tower
Amstelplein 1
1096 HA
Amsterdam
The Netherlands
Tel: +31 20 462 9366
Fax: +31 20 46 29 333
ania.gorna@nortonrosefulbright.com
www.nortonrosefulbright.com

VEIRANO ADVOGADOS

Av Brigadeiro Faria Lima
3477 16º andar 04538-133
São Paulo SP
Brazil
Tel: +55 11 2313 5700
ana.barretto@veirano.com.br
amanda.leal@veirano.com.br
www.veirano.com.br

SIDLEY AUSTIN LLP

1000 Louisiana Street, Suite 6000
Houston
Texas 77002
United States
Tel: +1 713 495 4500
Fax: +1 713 495 7799
dasmus@sidley.com
bbradshaw@sidley.com
acowan@sidley.com
www.sidley.com

WEBBER WENTZEL

90 Rivonia Road
Sandton
Johannesburg 2196
South Africa
Tel: +27 11 530 5000
Fax: +27 11 530 5111
alexandra.felekis@webberwentzel.com
mzukisi.kota@webberwentzel.com
nonkululeko.nojoko@webberwentzel.com
tina.terblanche@webberwentzel.com
ntokozi.qwabe@webberwentzel.com
www.webberwentzel.com

**SKADDEN, ARPS, SLATE,
MEAGHER & FLOM LLP**

4 Times Square
New York, NY 10036
United States
Tel: +1 212 735 3000
david.armstrong@skadden.com
gregory.howling@skadden.com
robert.warfield@skadden.com
www.skadden.com

THE LAWREVIEWS

For more information, please contact info@thelawreviews.co.uk

THE ACQUISITION AND LEVERAGED FINANCE REVIEW

Marc Hanrahan

Milbank Tweed Hadley & McCloy LLP

THE ANTI-BRIBERY AND ANTI-CORRUPTION REVIEW

Mark F Mendelsohn

Paul, Weiss, Rifkind, Wharton & Garrison LLP

THE ASSET MANAGEMENT REVIEW

Paul Dickson

Slaughter and May

THE ASSET TRACING AND RECOVERY REVIEW

Robert Hunter

Edmonds Marshall McMahon Ltd

THE AVIATION LAW REVIEW

Sean Gates

Gates Aviation LLP

THE BANKING LITIGATION LAW REVIEW

Christa Band

Linklaters LLP

THE BANKING REGULATION REVIEW

Jan Putnis

Slaughter and May

THE CARTELS AND LENIENCY REVIEW

John Buretta and John Terzaken

Cravath Swaine & Moore LLP and Simpson Thacher & Bartlett LLP

THE CLASS ACTIONS LAW REVIEW

Camilla Sanger

Slaughter and May

THE COMPLEX COMMERCIAL LITIGATION LAW REVIEW

Steven M Bierman

Sidley Austin LLP

THE CONSUMER FINANCE LAW REVIEW
Rick Fischer, Obrea Poindexter and Jeremy Mandell
Morrison & Foerster

THE CORPORATE GOVERNANCE REVIEW
Willem J L Calkoen
NautaDutilh

THE CORPORATE IMMIGRATION REVIEW
Chris Magrath
Magrath LLP

THE DISPUTE RESOLUTION REVIEW
Damian Taylor
Slaughter and May

THE DOMINANCE AND MONOPOLIES REVIEW
Maurits J F M Dolmans and Henry Mostyn
Cleary Gottlieb Steen & Hamilton LLP

THE EMPLOYMENT LAW REVIEW
Erika C Collins
Proskauer Rose LLP

THE ENERGY REGULATION AND MARKETS REVIEW
David L Schwartz
Latham & Watkins

THE ENVIRONMENT AND CLIMATE CHANGE LAW REVIEW
Theodore L Garrett
Covington & Burling LLP

THE EXECUTIVE REMUNERATION REVIEW
Arthur Kohn and Janet Cooper
Cleary Gottlieb Steen & Hamilton LLP and Tapestry Compliance

THE FINANCIAL TECHNOLOGY LAW REVIEW
Thomas A Frick
Niederer Kraft Frey

THE FOREIGN INVESTMENT REGULATION REVIEW
Calvin S Goldman QC
Goodmans LLP

THE FRANCHISE LAW REVIEW
Mark Abell
Bird & Bird LLP

THE GAMBLING LAW REVIEW
Carl Rohsler
Memery Crystal

THE GLOBAL DAMAGES REVIEW

Errol Soriano
Duff & Phelps

THE GOVERNMENT PROCUREMENT REVIEW

Jonathan Davey and Amy Gatenby
Addleshaw Goddard LLP

THE HEALTHCARE LAW REVIEW

Sarah Ellson
Fieldfisher LLP

THE INITIAL PUBLIC OFFERINGS LAW REVIEW

David J Goldschmidt
Skadden, Arps, Slate, Meagher & Flom LLP

THE INSOLVENCY REVIEW

Donald S Bernstein
Davis Polk & Wardwell LLP

THE INSURANCE AND REINSURANCE LAW REVIEW

Peter Rogan
Ince & Co

THE INSURANCE DISPUTES LAW REVIEW

Joanna Page
Allen & Overy LLP

THE INTELLECTUAL PROPERTY AND ANTITRUST REVIEW

Thomas Vinje
Clifford Chance LLP

THE INTELLECTUAL PROPERTY REVIEW

Dominick A Conde
Fitzpatrick, Cella, Harper & Scinto

THE INTERNATIONAL ARBITRATION REVIEW

James H Carter
Wilmer Cutler Pickering Hale and Dorr

THE INTERNATIONAL CAPITAL MARKETS REVIEW

Jeffrey Golden
P.R.I.M.E. Finance Foundation

THE INTERNATIONAL INVESTIGATIONS REVIEW

Nicolas Bourtin
Sullivan & Cromwell LLP

THE INTERNATIONAL TRADE LAW REVIEW

Folkert Graafsma and Joris Cornelis
Vermulst Verhaeghe Graafsma & Bronckers (VVGb)

THE INVESTMENT TREATY ARBITRATION REVIEW

Barton Legum

Dentons

THE INWARD INVESTMENT AND INTERNATIONAL TAXATION REVIEW

Tim Sanders

Skadden, Arps, Slate, Meagher & Flom LLP

THE ISLAMIC FINANCE AND MARKETS LAW REVIEW

John Dewar and Munib Hussain

Milbank Tweed Hadley & McCloy LLP

THE LABOUR AND EMPLOYMENT DISPUTES REVIEW

Nicholas Robertson

Mayer Brown

THE LENDING AND SECURED FINANCE REVIEW

Azadeh Nassiri

Slaughter and May

THE LIFE SCIENCES LAW REVIEW

Richard Kingham

Covington & Burling LLP

THE MERGER CONTROL REVIEW

Ilene Knable Gotts

Wachtell, Lipton, Rosen & Katz

THE MERGERS AND ACQUISITIONS REVIEW

Mark Zerdin

Slaughter and May

THE MINING LAW REVIEW

Erik Richer La Flèche

Stikeman Elliott LLP

THE OIL AND GAS LAW REVIEW

Christopher B Strong

Vinson & Elkins LLP

THE PATENT LITIGATION LAW REVIEW

Trevor Cook

WilmerHale

THE PRIVACY, DATA PROTECTION AND CYBERSECURITY LAW REVIEW

Alan Charles Raul

Sidley Austin LLP

THE PRIVATE COMPETITION ENFORCEMENT REVIEW

Ilene Knable Gotts

Wachtell, Lipton, Rosen & Katz

THE PRIVATE EQUITY REVIEW

Stephen L Ritchie
Kirkland & Ellis LLP

THE PRIVATE WEALTH AND PRIVATE CLIENT REVIEW

John Riches
RMW Law LLP

THE PRODUCT REGULATION AND LIABILITY REVIEW

Chilton Davis Varner and Madison Kitchens
King & Spalding LLP

THE PROFESSIONAL NEGLIGENCE LAW REVIEW

Nick Bird
Reynolds Porter Chamberlain LLP

THE PROJECT FINANCE LAW REVIEW

David F Asmus
Sidley Austin LLP

THE PROJECTS AND CONSTRUCTION REVIEW

Júlio César Bueno
Pinheiro Neto Advogados

THE PUBLIC COMPETITION ENFORCEMENT REVIEW

Aidan Synnott
Paul, Weiss, Rifkind, Wharton & Garrison LLP

THE PUBLIC-PRIVATE PARTNERSHIP LAW REVIEW

Bruno Werneck and Mário Saadi
Mattos Filho, Veiga Filho, Marrey Jr e Quiroga Advogados

THE REAL ESTATE LAW REVIEW

John Nevin
Slaughter and May

THE REAL ESTATE M&A AND PRIVATE EQUITY REVIEW

Adam Emmerich and Robin Panovka
Wachtell, Lipton, Rosen & Katz

THE RENEWABLE ENERGY LAW REVIEW

Karen B Wong
Milbank

THE RESTRUCTURING REVIEW

Christopher Mallon
Skadden, Arps, Slate, Meagher & Flom LLP

THE SECURITIES LITIGATION REVIEW

William Savitt
Wachtell, Lipton, Rosen & Katz

THE SHAREHOLDER RIGHTS AND ACTIVISM REVIEW

Francis J Aquila

Sullivan & Cromwell LLP

THE SHIPPING LAW REVIEW

George Eddings, Andrew Chamberlain and Rebecca Warder

HFW

THE SPORTS LAW REVIEW

András Gurovits

Niederer Kraft Frey

THE TAX DISPUTES AND LITIGATION REVIEW

Simon Whitehead

Joseph Hage Aaronson LLP

THE TECHNOLOGY, MEDIA AND TELECOMMUNICATIONS REVIEW

John P Janka

Latham & Watkins

THE THIRD PARTY LITIGATION FUNDING LAW REVIEW

Leslie Perrin

Calunius Capital LLP

THE TRADEMARKS LAW REVIEW

Jonathan Clegg

Cleveland Scott York

THE TRANSFER PRICING LAW REVIEW

Steve Edge and Dominic Robertson

Slaughter and May

THE TRANSPORT FINANCE LAW REVIEW

Harry Theochari

Norton Rose Fulbright

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Michael S Sackheim and Nathan A Howell

Sidley Austin LLP

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ISBN 978-1-912228-72-0