Project Finance

Introductory Manual on Project Finance for Managers of PPP Projects

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1. Introduction

This *Project Finance* manual provides managers of public-private partnership (PPP) projects with a broad understanding of the process around project financing. Although the responsibility for arranging project financing lies with the private sector participant(s), all stakeholders must understand the process when evaluating the value for money conditions set out in the *Treasury Regulations* on PPP projects. Understanding the process will also assist departmental managers to manage transaction advisors and in negotiating with private sector parties. Finally, it is important to understand that the processes and structures used in the financing of projects are dynamic and continue to evolve. All stakeholders will therefore need to be flexible.

PPPs are often funded through the department's budget, but may also be partially or completely funded by the users of the service (e.g. a toll road or port). PPP projects vary significantly in term and in structure. Every project requires a certain level of financing, but this *Project Finance* manual primarily addresses the financing of longer-term PPP projects in which the private sector provider is required to raise funds for capital investment. Most of these PPPs provide social services to the public.

The objective of using project financing to raise capital is to create a structure that is bankable (of interest to investors) and to limit the stakeholders' risk by diverting some risks to parties that can better manage them. In project financing, an independent legal vehicle is created to raise the funds required for the project. Payment of principal, interest, dividends and operating expenses is derived from the project's revenues and assets. The investors, in both debt and equity, require certain basic legal, regulatory and economic conditions throughout the life of the project.

The project's revenues are obtained from the government and/or fees (tariffs) charged to the users of the service. In some projects, the private sector provider also pays concession fees to the government or to another designated authority, in return for the use of the government's assets and/or the rights to provide the service, which is often a monopoly. In toll roads and ports projects, for example, the concession fee is based on the use of the service or the net income, giving the government a vested interest in the success of the project. In this case, the government's interests are comparable to those of an equity investor.

The rest of this *Project Finance* manual addresses the general structure of a project, funding alternatives, investor profiles, and the criteria investors will consider before and during the implementation and operation of the project. This is followed by a discussion of the terms and conditions often required by investors, and of the various financing (equity and debt) strategies to be considered by the sponsors of the project. This manual uses examples of existing PPP projects in South Africa, frequently referring to Trans African Concessions (Pty) Limited (TRAC), which was awarded the 30-year build-operate-transfer (BOT) concession for the N4 toll road between Witbank, South Africa and Maputo, Mozambique. This concession is discussed in more detail in Annexure 1. Annexure 2 outlines the various ratios used in project financing,while Annexure 3 defines the risks inherent to PPP projects. Annexure 4 provides a glossary of terms.

2. Project finance structures

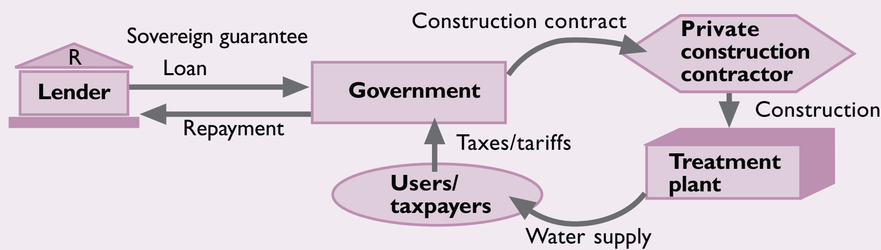
Project funding can be obtained from various sources. The charts below demonstrate the difference between public, corporate and project funding, using an example of a water treatment project.

Public Finance

For years, many governments, including the South African government, funded projects by using existing surplus funds or issued debt (government bonds) to be repaid over a specific period. However, governments have increasingly found this funding to be less attractive, as it strained their own balance sheets and therefore limited their ability to undertake other projects. This concern has stimulated the search for alternative sources of funding.

Chart 1: Public finance

- A government borrows funds to finance an infrastructure project and gives a sovereign guarantee to lenders to repay all funds. Government may contribute its own equity in addition to the borrowed funds.
- Lenders analyse Government's total ability to raise funds through taxation and general public enterprise revenues, including new tariff revenue from the project.
- The sovereign guarantee shows up as a liability on Government's list of financial obligations.

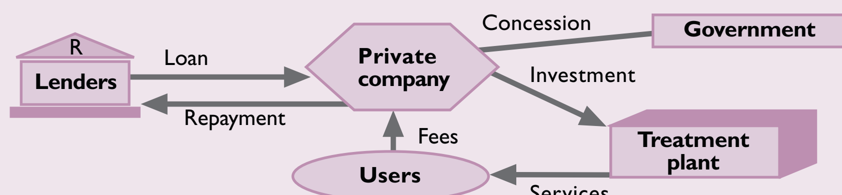


Corporate Finance

The following chart illustrates the structure of a water treatment project in which the private sector participant uses its own credit for raising the funds due to its capacity and the limited size and nature of the project. This option is often used for shorter, less capital-intensive proj-

Chart 2: Corporate finance

- A private company borrows funds to construct a new treatment facility and guarantees to repay lenders from its available operating income and its base of assets.
- The company may choose to contribute its own equity as well.
- In performing credit analysis, lenders look at the company's total income from operations, its stock of assets, and its existing liabilities.
- The loan shows up as a liability on the company's balance sheet ("Mining the Corporate Balance Sheet")



ects that do not warrant outside financing. However, as with government financing, private companies avoid this option, as it strains their balance sheets and capacity, and limits their potential participation in future projects.

Project Finance

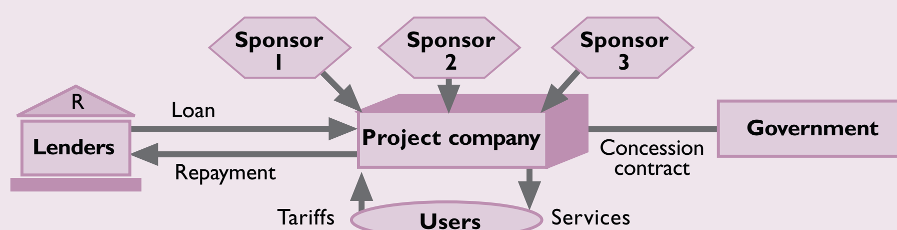
Project financing uses the project's assets and/or future revenues as the basis for raising funds. Generally, the sponsors create a special purpose, legally independent company in which they are the principal shareholders. The newly created company usually has the minimum equity required to issue debt at a reasonable cost, with equity generally averaging between 10 and 30 per cent of the total capital required for the project. Individual sponsors often hold a sufficiently small share of the new company's equity, to ensure that it cannot be construed as a subsidiary for legal and accounting purposes.

The final legal structure of each independent project is different. The following chart illustrates a simple project finance example. It shows that the legal vehicle (company) frequently has more than one sponsor, generally because:

- the project exceeds the financial or technical capabilities of one sponsor
- the risks associated with the project have to be shared
- a larger project achieves economies of scale that several smaller projects will not achieve
- the sponsors complement each other in terms of capability
- the process requires or encourages a joint venture with certain interests (e.g. local participation or empowerment)
- the legal and accounting rules stipulate a maximum equity position by a sponsor, above which the project company will be considered a subsidiary.

Chart 3: Project finance

- A team or consortium of private firms establish a new project company to build, own and operate a specific infrastructure project. The new project company is capitalised with equity contributions from each of the sponsors.
- The project company borrows funds from lenders. The lenders look to the projected future revenue stream generated by the project and the project company's assets to repay all loans.
- The host country government does not provide a financial guarantee to lenders; sponsoring firms provide limited guarantees. "Off-Balance-Sheet" financing.



In large projects, different legal vehicles may be established to perform specific functions (i.e. construction, maintenance and actual ownership). The structure is often dictated by tax and other legal conditions, as well as by the credit implications for each participant. In designing the structure of the project, stakeholders should maintain maximum flexibility. In other words, sponsors often have other interests in the project, including the design, construction or management of the project, for which they will establish independent legal entities. These relationships will be governed by additional contracts between the project company and the sponsors. Sponsors are not precluded from being lenders; this overlap often occurs in practice. Annexure 1 describes the N4 toll road, in which more than one project company was established and the sponsors' interests extend beyond their equity investment.

3. Project funding alternatives

This section outlines the types of long-term securities that a project may issue in raising funds. They are listed in order of seniority from the most risky, requiring the highest level of return, to the least risky, requiring the lowest returns.

- *Common equity* represents ownership of the project. The sponsors usually hold a significant portion of the equity in the project.
- *Preferred equity* also represents ownership of the project. However, the sponsors have a priority over the common equity holders in receiving dividends and funds in the event of liquidation.
- *Convertible debt* is convertible to equity under certain conditions, usually at the option of the holder. This debt is generally considered subordinate and senior lenders regard it as pseudo-equity.
- *Unsecured debt* can be either short- or long-term and, although not secured by specific assets, is senior to equity and pseudo-equity in receiving dividends and repayment of principal.
- *Secured debt* may also be short- or long-term and is secured by specific assets or sources of revenues.
- *Lease financing* can vary in terms of structure and duration, although the lessor always retains the rights to the leased assets. Tax issues and the strength of the collateral are usually the driving forces behind a lease strategy. A lessor may be able to depreciate an asset for tax purposes, or the lessee may be exempt from taxes or expect losses in the early stages of the project.

Banks generally offer other short-term funding options. These are best described by their use of funds and carry specific conditions that will meet those requirements.

- *Construction financing,* as the name suggests, is used for construction purposes and is usually very flexible with respect to drawdowns. When the construction is completed, it is generally replaced by one or more of the longer-term securities described above. The level of security required by the lender will vary. Construction financing lenders may require a designated long-term investor to commit to paying out the construction finance at a predetermined time. It is also not unusual for the lender of the construction financing to also be the long-term investor who will settle the construction financing.
- *Bridging finance* is similar to construction financing but can be used for other purposes, usually during inception. This form of financing is also generally terminated when longer-term funding is received. As with construction financing, bridge financing may require various levels of security, including a firm commitment on the part of a long-term lender to provide a facility for settling the bridging finance.
- *Line of credit* funding is obtained and repaid on a regular basis throughout the life of the project. Credit lines are used as a cash management tool and are usually set up with various banks. Because a line of credit will not necessarily be used, the fee structure is based primarily on a commitment fee – a percentage (usually between 1 and 3 per cent) of the total line of credit committed by the investor. A standard short-term interest rate is charged on any amount drawn on the line of credit.

Considering the dynamic nature of finance and the uniqueness of each project, hybrid securities are constantly being developed to meet investor requirements. Some forms of securities may be independent or attached to the securities listed above, such as options and rights to purchase additional securities (usually equity). Under certain conditions, other vehicles (e.g. trust funds and guarantees) may be established to reduce the risk to certain investors. It is essential that the terms, conditions and risks be well defined and understood by all participants. Annexure 1 briefly outlines the securities issued by TRAC, while funding options are discussed in section 7.

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4. Investor profiles

As with the financing alternatives, investor profiles vary widely from project to project. Investors include the sponsors, equity funds (unit trusts), banks, non-bank financial institutions (pension, insurance and trade union funds), suppliers, end-users (customers), the government, the management and employees of the project, and even the public. The functions and mandates of some of these institutions in South Africa are briefly described below.

- The *promoter* of a project is usually the government department responsible for providing services to the public. The department is primarily concerned with ensuring the provision of services of sufficient quantity and quality, and on a non-discriminatory basis. The sponsors of a project (see below) usually participate in promoting a project. For instance, when a potential private sector provider recognises the value (value for money) it can add to an existing or potential service, it can submit an unsolicited bid to the relevant government department.
- *Sponsors* usually include construction, supply, management and empowerment companies. They may derive other opportunities (e.g. construction, supply or management contracts) from projects such as toll roads, dams and power plants, but also from any project that requires significant capital investment. For this reason, other investors may require the sponsors to hold their investment for a minimum period (e.g. four years or until the shares are floated publicly, as discussed below).
- *Equity funds* may include locally registered unit trusts or foreign equity funds. Most funds have an investment mandate or strategy that allows them to invest in certain industries (e.g. infrastructure), geographical locations (e.g. southern Africa) or to promote certain social issues (e.g. black empowerment). These investors are primarily interested in the prospect of earning dividends or appreciation on their investment, and in achieving their social objectives.
- *Banks* are involved at least as short-term lenders and frequently as long-term lenders and financial arrangers (underwriters). On large projects, several banks may form a consortium to raise funds together. South African banks are currently bundling and securitising large project loans, and selling them to the public. The equity investors usually select one or more lead banks to manage the consortium or the process of raising funds. This selection is based on the banks' experience and capacity for raising funds in a certain industry and country. The banks' level of commitment in raising funds may be either a "firm commitment" or "best efforts". Stakeholders prefer a firm commitment, in which the bank will be required to furnish the funds even when it has failed to raise other funds. The fees (underwriting) paid to the bank for providing a firm commitment are therefore more expensive than for a best efforts arrangement. Underwriting fees generally vary between 1,5 and 5 per cent of the amount raised, depending on the size of the project, the type of security, the risk associated with the project and the level of commitment provided by the bank.

  Although the bank usually raises debt, it may also raise equity. The fees for raising equity are generally higher than for raising debt. The project may also hire a financial adviser to formulate a financing strategy. The adviser is usually independent of the lenders and underwriters to avoid conflicts of interest (see section 7). Annexure 1 shows the banks' non-financing involvement in the TRAC Consortium.
- *Non-bank financial institutions* include pension, insurance and trade union funds, with a primary function of investing their assets in medium or long-term securities. Although these institutions often have significant resources, they are generally quite limited, by law and/or mandate, in their investment options. As a result, these funds usually invest in the more senior securities to ensure that they obtain the cash flow required for meeting their payout obligations to their clients.
- *Suppliers* may also provide funding in the form of short- to medium-term debt or extended terms on accounts payable. A supplier may also be a sponsor and take an equity interest in a project. As with construction and management companies, the suppliers' primary interest in the project is usually the supply contract with the project company. Project compa-

nies may also enter into other risk-reducing agreements with suppliers, such as a long-term fixed price and quantity agreement. Investors will closely scrutinise the supplier's credit rating when an agreement involves the future delivery of services.

- *End-user* financing can be prepayment for the future delivery of services, but is more often a take-or-pay contract in which the end-user commits to purchasing a minimum amount of services over a period. Although this is not a straightforward form of financing, it can reassure investors. As the government is usually the end-user in PPP projects, it should carefully consider any such obligations.
- *Government* may not necessarily directly finance a project, but it often provides indirect financing through guarantees, take-or-pay contracts, sole provider licences and other commitments. In each case, it should fully understand and be in a position to undertake such risk. The government's objective is to provide affordable and best value-for-money services to the end-user. As noted, a government department may also be the promoter of a project, as with the TRAC project described in Annexure 1.
- *Management and employees* may promote or sponsor a PPP, This is more common in a straight privatisation, where the government provides incentives such as subsidised loans. Management and employees are usually part of the overall sponsor team that bids for a project, as they will ultimately continue as employees of the project. The government often requires any employee laid off as a result of a PPP to be given a first opportunity to bid for jobs created by the project.
- *Public participation* in the financing of a project usually comes at the operating stage. The process of listing a company's equity and/or debt is often included in an understanding between the sponsors, the government and the lenders, to allow the original equity investors to plan their exit strategy.

The party (or parties) responsible for funding must contact as many potential investors as possible early in the process. This reduces the cost of financing by increasing the potential investor base. Annexure 1 lists the equity and debt investors in TRAC, the N4 toll road concessionaire.

5. Investor criteria

The criteria investors set for determining the feasibility of a project, both quantitative and qualitative, include the following:

- The *strength and experience of the project sponsors and the government department or parastatal currently responsible for the function* are usually the most important criteria. Stakeholders consider the internal capacity and financial position of the sponsors, as well as sponsors' experience in the industry and country (this is an important consideration when forming the sponsor team). An important subcriterion is the experience of the sponsor team in working together on projects – a successful joint track record reassures the other stakeholders. The investors will also assess the strength and reputation of the government department currently responsible for the services, especially its technical capability, its reputation in dealing with other PPP projects, and its history of fee collection.
- The *project fundamentals and economics* are both quantitative and qualitative. Critical financial ratios are outlined in Annexure 2. A PPP project is first compared to the *public sector comparator* (PSC). The private sector participant must provide *value for money* in delivering services, but must also earn an acceptable rate of return relative to the risks. The sponsors are also interested in the *affordability* of the services (to the government) to ensure that funds will be available in the future. They will examine the fundamental and economic nature of the project (e.g. whether the service will become obsolete in future; or, on a fee-based project, whether users pay for the services they receive). The sponsors' feasibility study is usually prepared on a base (expected) best and worst case basis, and examines various critical

ratios, such as *liquidity, leverage, activity* and *profitability*. These important ratios are derived from the projected and eventually actual financial statements (i.e. balance sheet and the income and cash flow statements).
- The *credit of the project participants* is critical, as they must provide services over an extended period. Although the government often mitigates this criterion by requiring bidders to post a performance bond, other participants rely heavily on the contribution of each participant and are less able to reduce their risk.
- *Contractual arrangements* between the parties stipulate who is responsible for what. A proposal or bid in which an experienced company has only a small role is obviously less attractive and more risky than the stakeholders might initially have been led to believe.
- Investors may only be interested in investing funds in a project when they are awarded a project that precludes *competition*. On toll road projects, for example, the project company may require the assurance that the government will not build an alternative road. The government must carefully consider all the ramifications of such commitments. The prospect of deregulation may discourage investment in a PPP project, as investors may decide to wait until after the deregulation, when the services may be provided with fewer constraints.
- Stakeholders must consider many *risks* before entering into a project. These risks and the method for managing them are defined in detail in Annexure 3.
- The *financial covenants* included in the various agreements are important not only to the investors but also to all stakeholders. They may include a minimum equity to debt level, a restriction on the payment of dividends unless certain ratios are met, or a minimum debt coverage ratio. Many of the potential financial covenants to be included in agreements are discussed in detail in Annexure 3.
- *Other covenants* include a minimum asset maintenance level (e.g. 2 percent of asset value), restrictions on the transfer of ownership of the project, and restrictions on the extent and nature of the services a sponsor may provide. These non-financial covenants increase the level of comfort of investors and other stakeholders. In the N4 TRAC agreements, sponsors may not provide services beyond those included in providing the turnkey project, without obtaining authorisation from the majority shareholder. The sponsors must also follow the standard procurement policy in bidding on the service. The Mozambican sponsors were ultimately not required to obtain majority shareholder authorisation.
- The *added value* that a given sponsor may bring to the project may include synergies and a more efficient or effective method of providing the services. Synergies will be achieved if the sponsor already provides such services and therefore has the infrastructure necessary for including the government as an additional client. The sponsor may also have the technology to provide the service more efficiently and effectively. In an information technology PPP, for instance, it may already have the latest mainframe capacity needed by a line department.
- Sponsors and investors also consider the existing *legislative environment,* and *incentives* that may be available. The legislative environment may include the nature and risk of operating under existing tax, labour and property ownership laws, and the likelihood that these may be revised in the future. Incentives may include reduced tax rates or tax holidays. In certain countries, the ability of foreign investors to repatriate their initial investment and interest or dividends is also an important consideration.

Investors will consider all these criteria in determining not only whether to invest, but also the level of risk to which they will be exposed and, consequently, the rate of return they will require. A country and government with a history of successful PPP projects and a strong legal foundation will be better placed when negotiating new PPP contracts. Departmental managers responsible for analysing and implementing PPP projects should be familiar with the investors' concerns when promoting the project and when negotiating with the selected private sector providers.

6. Terms and conditions of investment agreements

All investment agreements, especially those related to debt, include many terms and conditions. Although each agreement generally follows a set structure, certain terms and conditions may be unique. The general terms and conditions included in most agreements are outlined below:

- The *amount of funding* related to a specific security: this reflects the initial principal to be invested, and often includes the underwriting, arranging or success fee paid to the underwriter or arranging bank. The amount to be funded should be sufficient to cover construction and operating costs, as well as interest and contingency costs incurred during construction. Departments can transfer this risk to the private sector by negotiating a turnkey contract in which the cost of constructing, upgrading or expanding the project facilities is agreed on up front.
- *Drawdown conditions* stipulate how funds will be transferred from the investors' account to the project's account. The schedules are based on the project's cash flow requirements. Debt investors often require equity drawdowns to be either greater or equal, in proportion, to the debt drawdowns, or set certain milestones or conditions for drawdowns.
- *Pricing (interest rate or preferred dividend)* is the cost of borrowing the funds, and is based on existing market rates plus an amount for risk. Longer-term securities will require higher interest rates than short-term securities, except under unusual economic conditions. Both fixed and variable interest rates may be negotiated. A fixed interest rate transfers the risk of inflation and high interest rates to the lender, who is ultimately rewarded for taking such risk. A variable interest rate structure retains the risk at project level.
- The *repayment schedule* sets out how the principal debt will be repaid – on either a "straight line" or a "balloon" basis (when it is repaid at the end of the project). Many repayment schedules include grace periods in which no payment is required on principal and may even include an interest accrual period in which interest is added to the principal rather than paid to the investor. Section 7 addresses the repayment schedule options in detail.
- A *grace period* is an opportunity for deferring payments of principal for a pre-established period. Although interest payments are usually due throughout, projects may also negotiate to have the interest capitalised (added to the principal) during the grace period. This condition is often negotiated through the construction period. Annexure 1 shows that all of TRAC's long-term debt carries a grace period of 4-10 years.
- The *term or maturity* of a debt issuance reflects when the final payment is due. The term is generally based on the projected life of the assets (e.g. 15-25 years). Under this condition, the depreciation or amortisation of the assets will frequently mirror the scheduled repayment of principal (see section 7).

The conditions on a funding agreement usually include, but are not limited to the following:

- *Conditions precedent to closing* can include issues such as receiving regulatory approvals, legal opinions or closing of other agreements before finalising the funding agreement. This condition allows the funding process to move forward and allows all agreements to be closed quickly.
- *Representations and warranties* by the sponsors of the project are often included in the debt funding agreements. These may include conditions regarding the legal status of the sponsors, or assurances that the construction will meet certain conditions.
- *Restrictions on related party transactions* are virtually always required when the sponsors may be in a position to provide goods and services to the project, and also covers affiliates of the related parties. The purpose of this condition is to preclude related parties from benefiting from contracts that do not reflect market rates.
- *Security (collateral)* can be provided in the form of specific short-term assets (accounts receivable or cash), long-term assets (property), contracts or revenues. The secured debt holder has the first right to the assigned security in case of liquidation.

- The *use of proceeds* conditions ensure that funds are used for the purposes specified by the sponsors.
- *Events of default* include the financial viability of the sponsors, the quality of the services provided and the ability of the project to provide these services in the future. The terms and conditions for rectifying events of default may require one party to notify the other/s in writing, thereby initiating default procedures.

In addition to the terms and conditions of the funding agreement, the creditors may enter into *inter-creditor and common trust securities agreements* that do not include the project company. These agreements may address issues such as who will provide the working capital, how the security or collateral will be divided and the manner in which remedies will be undertaken, if necessary. Collateral may also be held in a common trust.

7. Financing strategies

The sponsors are responsible for developing the financing strategy, and will usually hire a financial adviser (e.g. investment or merchant bank) to design the strategy. Advisers must have the technical expertise, contacts, track record and innovative thinking necessary for planning and implementing complex strategies. In conjunction with the sponsors, they explore and contact potential sources of finance, and analyse the opportunities and methods for diverting risk from sponsors while maximising the project's ability to leverage or maximise its gearing ratio.

The financing strategy is based on the cash flow requirements of the project and includes multiple sources of funds. The long- and short-term options for funding (described in section 3 above) are used extensively from the inception through the termination of a project. PPP department managers should be fully aware of the various potential investor strategies, allowing them to focus their negotiations with potential investors.

The following issues should be considered in developing a financing strategy:

- What does the investment market want?
- What should be the average maturity of the project's securities?
- What should be the gearing ratio of a project's capital structure?

The sections below address each of these issues in turn.

Needs of the investment market

Investment strategies are dynamic and can change on a daily or weekly basis. Investors aim at maximising their returns while minimising their risk. Therefore, their appetite for investment may vary between the following options:

- Fixed vs variable rates – an investor whose liabilities and debt are fixed will generally prefer fixed-rate investments.
- Long- vs short-term investment – as above, an investor with long-term liabilities and capital (e.g. a pension fund) will prefer long-term loans.
- Industry type – an infrastructure fund with a disproportionately low investment in, for instance, electricity generation may be interested in increasing its holdings in this industry.
- Location – when most of an investor's holdings are in Gauteng, for instance, other areas, such as the Cape, may be more attractive.
- Economic expectations – an investor that expects tourism to grow rapidly may be interested in investing in infrastructure with a tourism component.
- Demographic expectations – an investor expecting the middle class to grow strongly may be interested in investing in projects that target this market segment.

- Development of a relationship – when aiming at participating in future projects with the same sponsors, investors may want to get their "foot in the door".
- Debt vs equity – an investor heavily exposed to debt may only be interested in equity or pseudo-equity.

Average maturity of securities

As a rule, the (real versus accounting) average life of a project's assets should determine the average life of its capital structure. This is important for two strategic reasons:

- The amortisation of project debt should reflect the depreciation pattern of the assets, thereby achieving the proper schedule of depreciation expense to payment of principal.
- Matching the life of the project's capital with that of its assets may reduce the cash flow implications of the repayment of the debt principal.

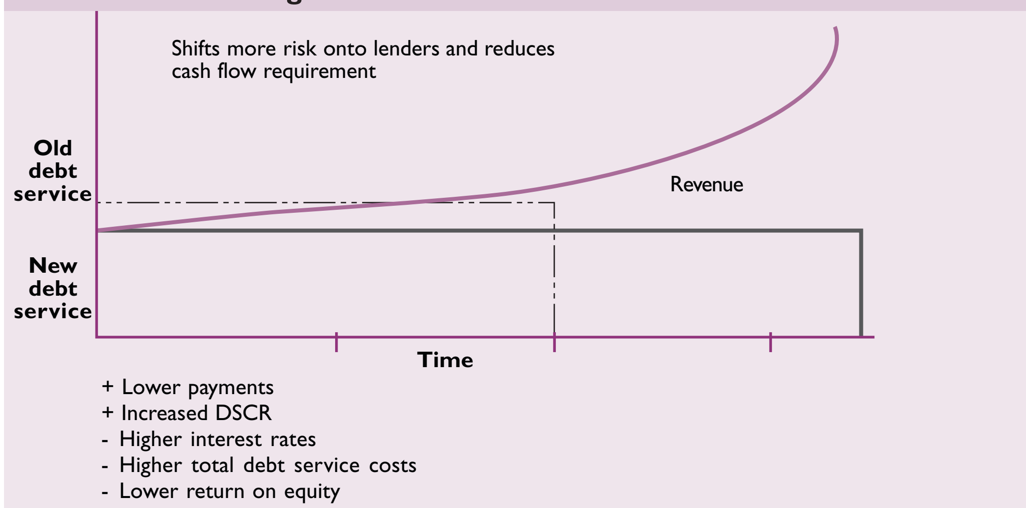
This condition is particularly critical in highly capitalised infrastructure projects, where ratepayers will benefit from the operations of the asset throughout the project life. Therefore, the cash flow requirements of interest payments and of repaying the principal should be carried equally by ratepayers who benefit at different stages of the project life.

Gearing ratio of the capital structure

Sponsors aim at minimising the level of equity in favour of debt. However, as the equity level decreases, the unit cost of debt increases as the debt investors take on additional risk. Although earnings may decrease owing to higher interest payments, the level at which they decrease is less than the additional earnings available per equity share, as the required rate of return on debt is less than that on equity. For example, the debt investors in TRAC are comfortable with an equity to total capital ratio of 20 per cent. (This ratio usually varies between 10 and 30 per cent depending on the nature and risk of the project.) The dynamics of the financing strategy are illustrated below to demonstrate how this strategy can affect project viability:

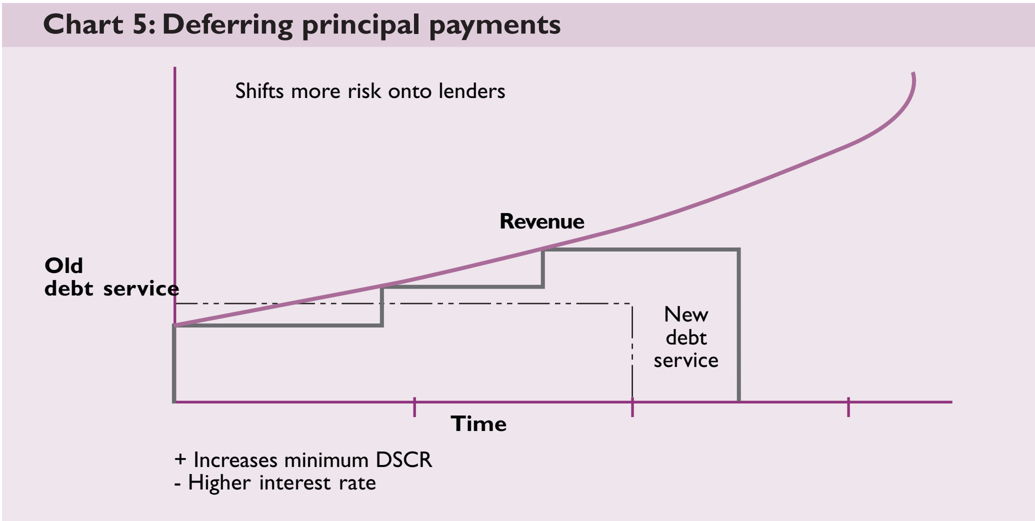
- The debt service coverage ratio (DSCR) is the most important ratio for debt investors. It is defined as the *earnings before interest, taxes, depreciation and amortisation divided by the debt service (the payment of interest and repayment of principal)*. By *extending the term of the debt* (see chart below), *the DSCR is increased because shorter-term debt service payments are decreased.* The obligation to pay debt service is also extended in the longer term (when revenues will be sufficient), allowing the revenue available for debt service to exceed the debt service throughout the project life. In this scenario, the lenders' risk is increased and, therefore, the cost (interest rate) is also higher.

Chart 4: Extending the debt term



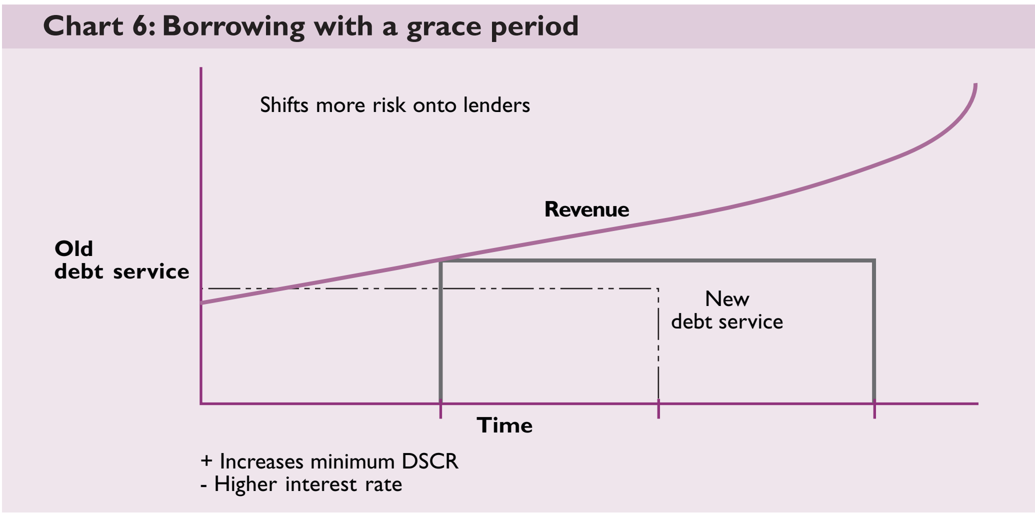
- By *deferring principal payments* (see chart 5), *the cash flow from revenues becomes sufficient to meet debt service requirements.* The lenders' risk is increased, necessitating a higher interest rate. One form of deferring principals is to make a balloon payment at the end of the term.

Chart 5: Deferring principal payments



- The cash flow requirements of the project can also be met by *borrowing with a grace period* (see chart 6). Again, the lender risk is higher and, therefore, so is the cost.

Chart 6: Borrowing with a grace period



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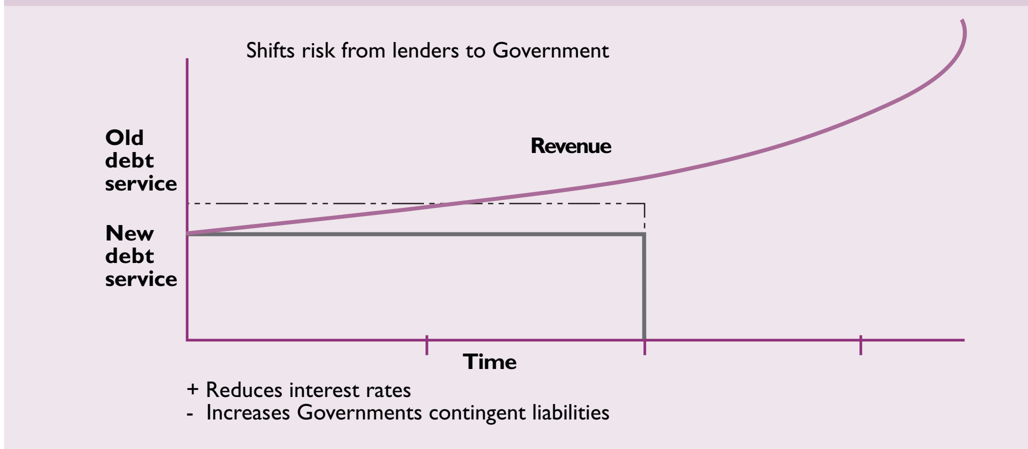
- A *guarantee* (see chart 7) by a more creditworthy entity (e.g. government) *will lower the interest for the original life of the loan,* thereby reducing the debt service level to below the revenues available for debt service.

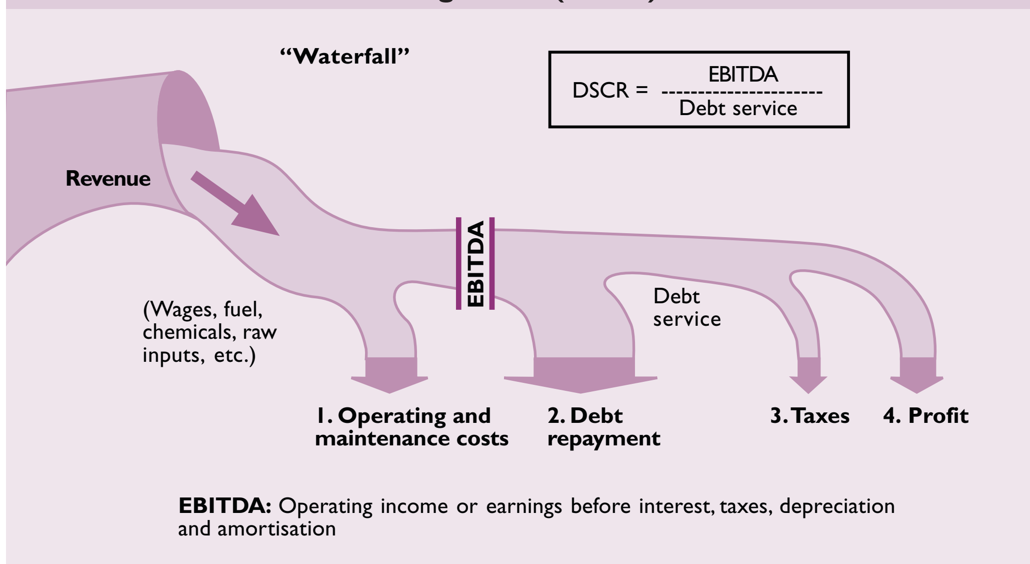
Chart 7: Providing a government guarantee on a portion of the debt



Debt structuring can also involve other financing methods, such as short-term debt to finance the shortfall in the earlier period. The debt structuring options can be used individually or in combination, and the parties developing the finance strategy must remain flexible and explore all available options.

- The primary *options for enhancing credit or the feasibility of a project* are discussed below. These methods are both operational and financial, and can be used independently or in combination, as illustrated in the "waterfall" example (see chart 8). The waterfall method of demonstrating fund flows consists of the cash inflows (revenues) and outflows (operational and maintenance costs, debt service, and outflows of cash, taxes and profits).

Chart 8: Debt service coverage ratio (DSCR)

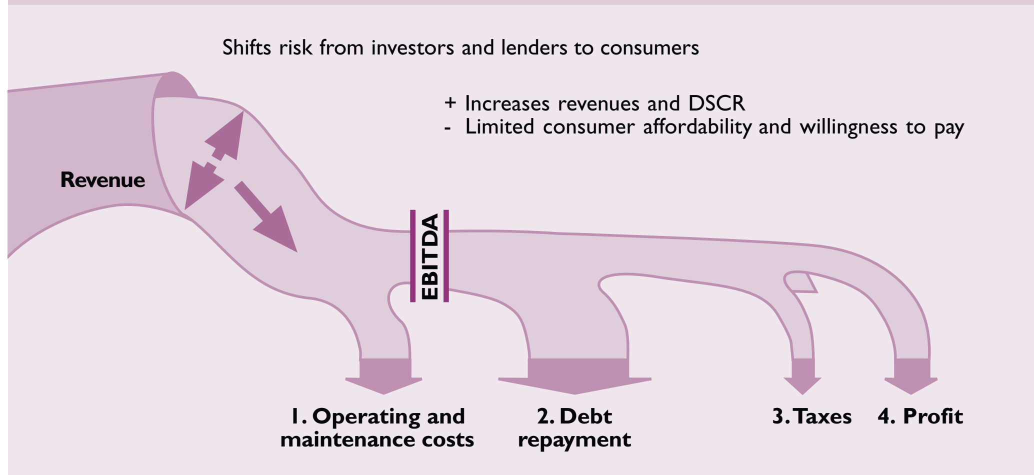


EBITDA: Operating income or earnings before interest, taxes, depreciation and amortisation

These strategic financial engineering options include the following:

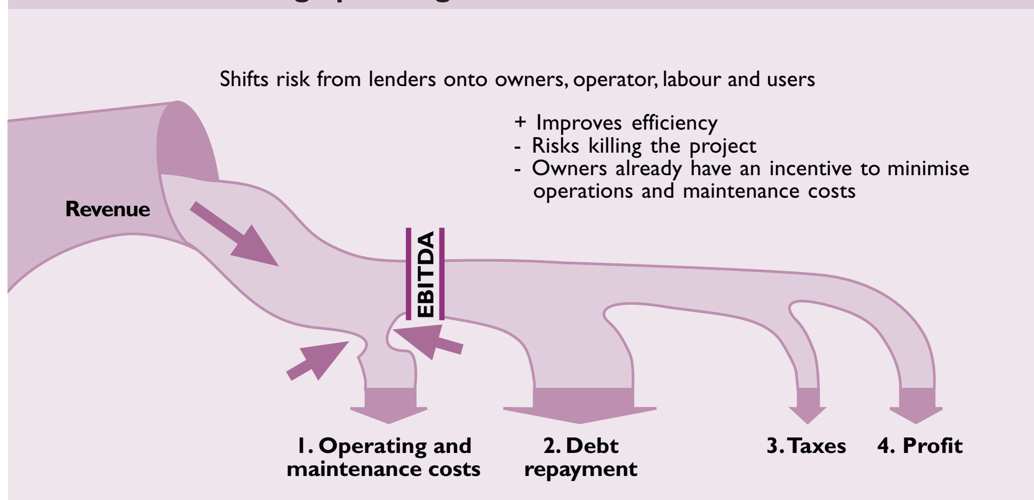
- *Increasing tariffs* (see chart 9) is one option for making the project feasible, and may reflect higher government payments for the provision of services. However, the value for money condition set out in the *Regulations* and *Guidelines* for PPPs may preclude this option.

Chart 9: Increasing tariffs



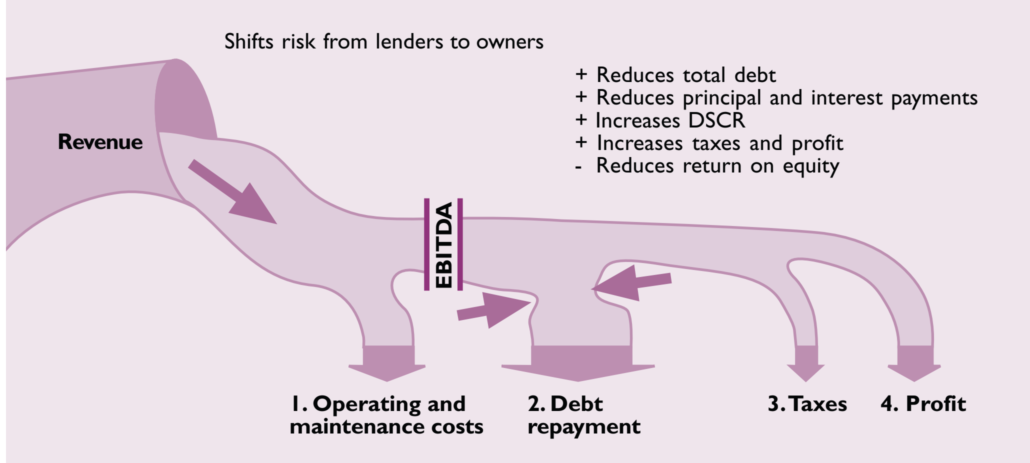
- *Decreasing operating and maintenance costs* (see chart 10) may improve the efficiency of the project, but may also undermine the project if it is already operating efficiently or if such reductions are mismanaged.

Chart 10: Reducing operating and maintenance costs



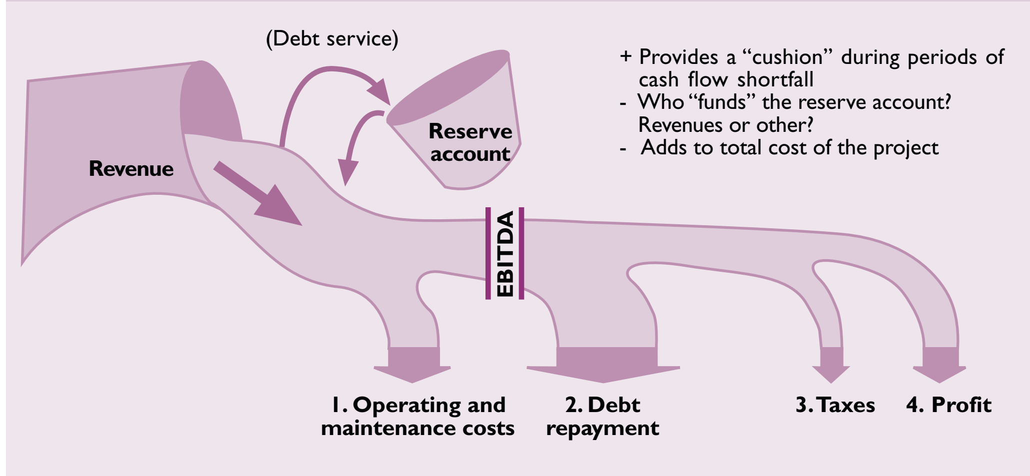
- *An increase in equity* (see chart 11) will reduce the amount of debt financing required, but may also reduce the return on equity to an unacceptable level, as noted above.

Chart 11: Increasing equity participation



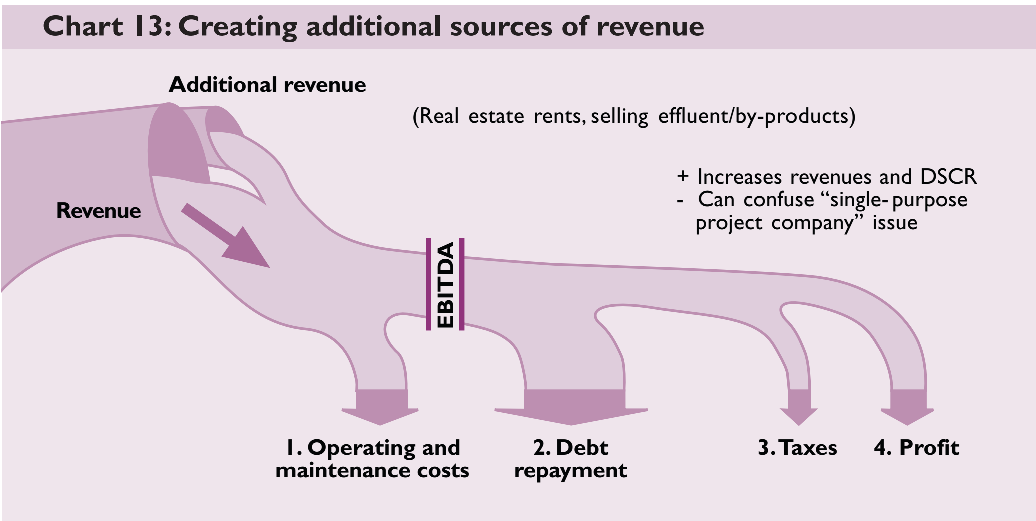
- *Establishing a reserve account* (see chart 12) may satisfy the beneficiaries of the reserve account (usually the debt holders) and reduce the cost of debt. The source of funds for such a reserve account may be the project's revenue or an independent third party. In either case, this increases the overall cost of the project as the funds in the reserve account could have been better invested.

Chart 12: Establishing a reserve account



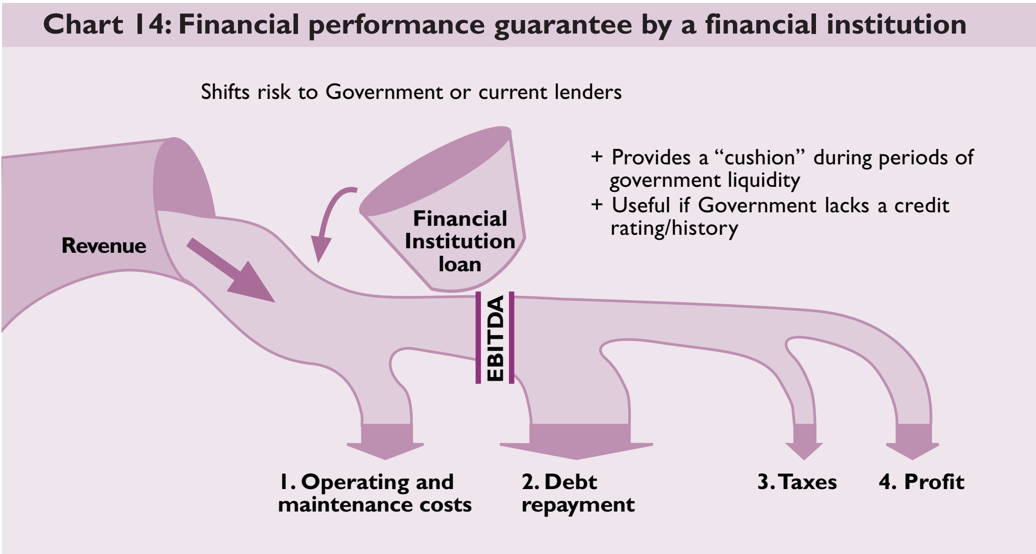
- *Finding another source of revenues* within the project (see chart 13) when the project sells a by-product of its goods and services, or rents out space within its buildings. Although this increases revenues, it will also distort the apparent financial performance of the project. Some sources of other revenue are logical (selling by-products), while others may indicate excess capacity in the project.

Chart 13: Creating additional sources of revenue



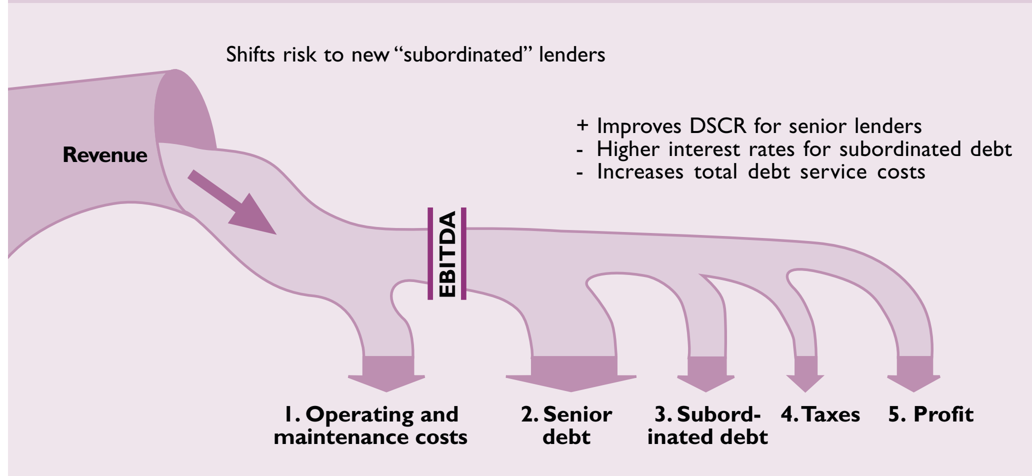
- *A third party guarantee*, such as by a financial institution (see chart 14). This option has a specific cost that the project or government will be required to pay either directly or indirectly.

Chart 14: Financial performance guarantee by a financial institution



- *Subordinate (mezzanine) debt* can be created to reduce the cost of senior debt (see chart 15). This is a common option because, although the cost of the subordinate debt is greater than that of the senior debt, it may create the necessary conditions for the senior debt holder to invest in the project.

Chart 15: Creating a mezzanine level of subordinated debt



Annexure 1: N4 toll road

The Trans African Concessions (Pty) Limited (TRAC) was awarded the 30-year build-operate-transfer (BOT) concession for the N4 toll road between Witbank, South Africa and Maputo, Mozambique.

Project finance structure

More than one project company was established and the sponsors' interests extend beyond their equity investment. The TRAC Consortium will own the assets for the life of the BOT, and the SBB Consortium, consisting of the primary TRAC Consortium construction companies (sponsors), is contracted to provide the construction and maintenance of the toll road. Three construction companies, Bouygues, Basil Read and Stocks & Stocks together own 40 per cent of the TRAC Consortium and 100 per cent of SBB. Although they are equity investors in the project, their primary interest is in the earnings they will generate in constructing and maintaining the toll road. Recognising this, the other equity and debt investors in the project require these sponsors to maintain their equity position in the TRAC Consortium for a minimum of four years.

TRAC financing structure

Equity
- R331 million to be increased if required (20 per cent of total financing)
- Sponsors – R132 million (40 per cent of equity)
- Non-sponsor equity holders – R199 million (60 per cent of equity)

Debt
- R1 324 million (80 per cent of total financing)

Loan	Amount	Term	Grace period on principal	Interest
Rand term	R469 million	15 years	4	2,125 per cent over the South African bank discount rate
CPI-linked	R455 million	20 years	4	6 per cent coupon subject to CPI indexation
DBSA	R200 million	20 years	10	2,125 per cent over the South African bank discount rate
Subordinated[1]	R200 million	15 years	5	3 per cent over the South African bank discount rate
Standby[2]	R175 million	15 years from draw down	4	2,35 per cent over the South African bank discount rate

1. Eight per cent of value warranted for the purchase of equity at original value
2. Draw down in conjunction with additional equity

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Non-financing bank participation in issuance of TRAC equity

Lead arranger
- Future Bank Corporation Merchant Bank (South Africa)

Co-arranger in Mozambique
- Banco Comercial e de Investimentos (Mozambique)

Underwriters
- Investec (South Africa)
- Banco Comercial e de Investimentos (Mozambique)
- Future Bank Corporation Merchant Bank (South Africa)

Development funding
- Commonwealth Development Corporation (United Kingdom)
- South African Infrastructure Fund (South Africa)

Equity and debt investors in TRAC

The governments of South Africa and Mozambique jointly and severally guarantee the debt of TRAC. Under certain conditions, the governments also jointly and severally guarantee the TRAC equity.

Equity (Sponsors/construction companies)
- Bouygues (France)
- Basil Read (South Africa)
- Stocks & Stocks (South Africa)

Equity (Non-sponsors)
- South African Infrastructure Fund (South Africa)
- RMB Asset Management (South Africa)
- Commonwealth Development Corporation (United Kingdom)
- South African Mutual Life Assurance (South Africa)
- Metropolitan Life Limited (South Africa)
- Sanlam Asset Management (South Africa)
- SDCM (Mozambique)

Debt (excluding equity investors that are also debt investors)
- ABSA Corporate and Merchant Bank (South Africa)
- Development Bank of South Africa Limited (South Africa)
- First National Bank (South Africa)
- Mine Employees and Officials Pension Funds (South Africa)
- Nedcor Bank (South Africa)
- Standard Corporate and Merchant Bank (South Africa)

Annexure 2: Financial ratios

Financial ratios are drawn from the actual or projected financial statements of a project company, such as the balance sheet, income statement and cash flow statement. The ratios may be compared from period to period for a given project, or used to compare the performance of the project with that of other projects in the same industry. Several industry groups and financial institutions publish industry ratios, including Standard & Poor's, Dun & Bradstreet, Dow Jones and Robert Morse Associates. Although these ratios can be valuable, this depends on the quality of the data, e.g. whether these were compiled on the basis of generally accepted (or recognised) accounting practice.

Liquidity ratios

Most investors (especially debt investors) are primarily concerned with liquidity, as they are interested in earning income on an ongoing basis and in recovering their original investment (principal).

The *current ratio* shows the ability of a project's current assets (e.g. cash, accounts receivable, inventory) to cover current liabilities (accounts payable, debt due within one year). A financial analyst will also examine the liquidity of each type of current asset (i.e. the ability to convert it to cash) and allow for any discount that may be required when converting the asset to cash. Cash is the most liquid asset. *The current ratio should comfortably exceed 1,00.*

Current ratio = Current assets/Current liabilities

The *quick or acid ratio* excludes less liquid assets (inventory) from the current ratio. *The acid ratio should exceed 1,00.*

Quick or acid ratio = (Current assets – Inventory)/Current liabilities

The *times interest earned ratio* allows debt investors to determine the extent to which interest obligations will be covered by revenues or turnover after operating costs. *Investors are usually looking for a comfortable margin (e.g. 1,50X).*

Times interest earned = (Earnings before interest, taxes, depreciation & amortisation)/Interest charged

The *fixed charge coverage* also takes into account any costs associated with leases that may be entered into by the project. *Investors and lessors are usually looking for a comfortable margin (e.g. 1,50X).*

Fixed charge coverage = (Earnings before lease charges, interest, taxes, depreciation & amortisation)/Interest & leases charged

The *debt service coverage ratio (DSCR)* is probably the most important ratio for lenders to a project. *Investors are usually looking for a comfortable margin (e.g. 1,75X).*

DSCR = (Earnings before interest, taxes, depreciation & amortisation)/(Interest & principal charged)

Leverage (gearing) ratio

The last three liquidity ratios mentioned above are largely based on the amount of debt and leases outstanding in the project. Non-liquidity related leverage ratios include the *debt ratio* and the related *equity* and *debt to equity* ratios. Generally, the higher the level of debt to equity, the more financially risky the project. The lower the level of debt to equity, the less profitable the project, as the profits must be shared by more equity investment in the project.

The *debt ratio* is the most common ratio for determining the leverage or gearing of a project. Debt investors in a project prefer a lower debt ratio and are usually satisfied with *between 70 and 90 per cent,* depending on the nature of the project.

Debt ratio = Total debt/Total assets

Activity ratios

These ratios are important to the sponsors and management of the project, as they measure the performance of the company against previous periods and against other companies in the same industry. The significance of each ratio is based on the nature of the business in which it operates. Therefore, these ratios are less generic and vary significantly from industry to industry. For instance, for a project that provides services, the inventory ratio may not be significant, but the average collection period ratio will be critical. It is often necessary to examine the operations of the project to determine whether circumstances, such as a change in operating policy, may be influencing these ratios and compromising their value.

The *average collection period* reflects the success of collections on the sale of services. The value of this ratio may be affected by a change in management's method for writing off bad receivables. *This ratio should be between 30 and 45 days for a utility (e.g. electricity and water), and close to 0 days for a toll road that collects fees at the tolls.*

Average collection period = Receivables/Sales per day
(where the sales per day is the total revenue or turnover divided by 365)

The *fixed asset turnover ratio* shows whether the fixed assets are being employed properly. This ratio is affected by other factors, such as the age of the project's plant. The older the plant (more depreciation), the better the ratio appears. *The higher the ratio, the more efficiently the project is operating. A highly capitalised project (e.g. a utility) will often have a ratio between 1 and 3.*

Fixed asset turnover = Sales/Net fixed assets

The *inventory turnover ratio* reflects the quality of inventory management of the project.

Inventory turnover = Sales/Inventory

Profitability ratios

The profitability ratios, although important to all participants, are especially important to the sponsors and other equity investors. These ratios show the level of profitability that can be expected on their investment and are often used by regulators as the basis for determining rate changes in a regulated project or payments by the government in a government-funded project.

The *profit margin on sales* shows the level of profit (after taxes) against the total sales of the project. This ratio is often compared to that of similar projects.

Profit margin on sales = Net profit after tax/Total sales

The *return on total assets* ratio is similar to the profit margin on sales, but shows the net income after taxes against the total assets. This ratio does not differentiate between debt and equity investment.

Return on total assets = Net profit after taxes/Total assets

The *return on equity* ratio differentiates between debt and equity investors. Equity includes the total amount invested in equity and any retained earnings (undistributed earnings) throughout the life of the project. *This ratio is similar to the internal rate of return (IRR) described below, and should be between 10 and 20 per cent after inflation.*

Return on equity = Net profits after taxes/Total equity

The *net present value (NPV)* shows the value of a series of cash flows, whether negative (e.g. investment and expenses) or positive (e.g. revenues or turnover), using an appropriate discount rate. The discount rate attaches a time value to the negative and positive cash flows – one rand today is worth more than a rand next year. The result will show a rand value to the project, based on the components described above. The NPV methodology is also used in determining the value for money criterion for PPP projects. Various proposals can be compared to each other on a value-for-money basis by determining which project will either yield the government more revenue or less cost. The formula for determining the NPV is given below; it is also included in most spreadsheet software and even on some calculators.

$$NPV = \sum_{t=1}^{N} (Rt/(1+k)t (- C$$

where
$\sum$ = Sum
R = Cash flow per period (t)
N = Project's expected life
k = Discount rate
C = Initial investment

The *internal rate of return (IRR)* formula determines the discount rate of the cash flow of a project, assuming an NPV of 0. It shows the annual rate of return on a percentage basis. If the NPV is 0, the IRR will equal the discount rate. The formula for IRR is similar to that for NPV with the result equal to 0, and the dependent variable being the *k* in the above equation. *The IRR required by equity investors depends on the nature and risk of the project. This rate must substantially exceed the rate of return on debt. The IRR expected by equity investors in South African infrastructure projects will vary between 10 and 20 per cent after inflation.*

Both the NPV and IRR are used extensively in analysing and comparing projects.

Other ratios

Other frequently used ratios, including non-financial ratios, measure performance and efficiency. Although the significance of these ratios will vary from industry to industry, they are often used as a benchmark in designing and implementing a project. Even within an industry, these ratios may differ from project to project, and stakeholders must be able to appreciate the differences.

The *number of customers per employee ratio* shows how efficiently a project operates with respect to the number of employees. A project with a relatively low or decreasing year-on-year rate is considered to be operating more efficiently.

Number of customers per employee = No. customers/No. employees

The *operating cost per kilometre* of water pipes or electricity lines is an example of an industry-specific ratio, in which variance may explained by population density, topography and the age of the infrastructure. *The lower this ratio compared to the industry, the more efficient the operations.*

Operating costs per kilometre = Operating costs/No. of kilometres of pipe or electricity line

Other such ratios may include:
- Customers/value of infrastructure
- Construction cost/kilometre of construction
- Net income/employee
- Net income/customer

Annexure 3: Risks

Availability risk

This is the risk that the services provided by the private sector party may be less than required under the contract with the public sector.

This risk is borne by the private sector company and contract conditions will penalise the private sector provider should a problem not be rectified in the prescribed time.

Completion (technical and timing) risk

This risk, which also includes construction and design risk, generally results in time and/or cost overruns that will require a substantial increase in capital and/or interest expenses during construction. It may be attributable to weather, labour strikes or late delivery of equipment and supplies.

The parties providing the engineering and construction services are often required to post a bond that may be drawn on should certain commitments not be met. Although this provides a certain level of comfort, the objective is to avoid exercising these guarantees. Other non-engineering or construction completion risks must also be considered and methods for mitigating them investigated.

Counterparty credit risk

Counterparty risk is the most obvious and common risk, and is associated with the other parties to an agreement being unable to meet their contracted obligation. This risk exists with suppliers, construction companies, customers or any other party that commits to meeting certain obligations in the future.

Counterparty risk is generally managed by undertaking a thorough due diligence (review of the credit rating) and, where required, obtaining a performance bond. Although the expense related to the performance bond will be passed on to customers, the bond enables entities in the business of taking counterparty risk (e.g. banks and insurance companies) and of performing the due diligence, to assume the risk. A third party may cover the performance bond totally or in part by funds or other liquid assets in a special purpose (escrow) account or by a guarantee. The third party guarantee is usually provided by an independent financial institution, but may also be given by an affiliate of the counterparty to the transaction.

Country (political) risk

Clearly, more stable political conditions and legal systems in a country will stimulate more investor interest in a project. In addition, the lower the risk, the lower the required rate of return (e.g. interest rate). Investors will generally review the history and current political conditions of the host country to assess the possibility of expropriation, nationalisation, war, restrictions on the repatriation of funds, or exchange controls. In addition, they will examine the likelihood of other changes within the legal system, particularly with respect to labour, tax and environmental issues. This risk is also referred to as legislative or policy risk.

Although some countries offer limited insurance against these risks, in order to promote exports to the host country, country risk is probably the most difficult risk to manage (apart from force majeure risk). Therefore, investors maintain a constant watch on the political conditions of the host country and make risk-limiting decisions on an ongoing basis (e.g. limiting

or freezing any additional capital investment, deferring maintenance or taking steps to repatriate funds).

Currency risk

Currency risk is, to a large extent, a part of the construction and operating risk of the project. South African PPP laws and regulations require all PPP projects to be denominated in rand. This will automatically shift the risk from the project to the supplier of the product or service. Currency risk occurs when the revenue or turnover and the expenses (operating or interest) of a project are in different denominations. Foreign investors will generally use their primary operating currency in determining the projected IRR or NPV of a project (see Annexure 2).

Although the existing PPP laws and guidelines mitigate currency risk, the most common method for managing this risk is to enter into a hedge agreement with the supplier and/or a third party financial institution, in which the project is assured a certain exchange rate. Before such an agreement is concluded, the counterparty's credit rating must be examined to reassure the project of the party's ability to meet its obligations. Other methods of mitigating this risk include arranging for a portion of the project's revenues or turnover to be paid in the relevant foreign currency.

Force majeure risk

This risk reflects the occurrence of unexpected and uncontrollable natural and/or man-made conditions, such as earthquakes, typhoons, flooding or war, which may negatively affect the construction or operations of a project.

These risks are generally taken on by the project promoters and investors for at least a limited time or amount of investment. Investors will certainly take the possibility of such occurrences into account when valuing the project and determining the required rate of return.

Inflation risk

This risk represents the possibility that the actual inflation rate will exceed the risk projected during the development of the feasibility study.

Inflation risk may be mitigated by including an actual index, based on inflation, in the contract's pricing formula, or by entering into long-term supply contracts with predetermined prices (these contracts increase the counterparty credit risk). To the extent that the risk cannot be controlled by the private sector, the public sector may decide to retain the risk, reducing the cost of the project.

Input and throughput risk

For non-extractive projects, in which the viability of the project depends on the supply of sufficient natural resources (e.g. water, power generation and gas pipeline), the input and throughput risk is critical.

As with resource risk, a proper due diligence must be undertaken to ensure that this risk is mitigated. This risk increases when the jurisdictions in which the source, throughput and ultimate consumption of the resources are different.

Market (demand) risk

Market risk relates to the demand for services to be provided by the project. It may be affected by factors such as increases in the cost of raw material (e.g. residual oil or natural gas in the

production of electricity), the development of a substitute service (e.g. a new road that parallels rail tracks), overall economic conditions, governmental policy (e.g. taxes), political developments, developments in the customer industries (e.g. tourism), and environmental concerns.

To mitigate this risk, the investors may request certain conditions in their concession or management agreement. These may include automatic rate increases under certain conditions, exclusive rights to provide the service, and/or take-or-pay conditions.

Operating risk

Operating risk applies to the various resources that are important to the operations of the project. This risk may be directly controlled by management (labour issues), or be due to external conditions (exchange rates on imported resources), inadequate maintenance, or design, engineering or construction faults that adversely affect the project's eventual operations. These problems may prevent the project from meeting the scheduled quantity and/or quality of services. Investors will generally rely on the operating experience of the promoters of the project to mitigate this risk.

Methods for mitigating operating risk include implementing employee-friendly labour policies (e.g. training, personal advancement, equity interest in project), long-term labour contracts that are acceptable to all parties, long-term fixed price supply contracts that support the projected profit margins, proper insurance, and adherence to all environmental laws and regulations (e.g. nuclear power plant operations).

Regulatory risk

Regulated projects, such as water, electricity generation or toll roads, face regulatory risk – being uncertain about the future pricing of services sold to customers. This risk ranges from a complete disallowance to recover costs, to a regulatory lag, in which any changes in pricing are based on historical factors.

This risk can be controlled by stipulating in the agreement that increases in the prices of volatile cost factors will automatically be passed on to customers. The cost of a natural resource (e.g. gas or residual oil for the production of electricity) is one example of such a volatile cost. Ratepayers also, however, face the risk that any decrease in costs attributable to changes in global economic conditions may not be passed on to them.

Residual value risk

This risk only applies to the contracts in which a value is attached to the assets when they are transferred back to the public sector at the end of the contract.

Allowing for the residual value of the assets to be determined at the end of the project can mitigate this risk. However, the residual value is dependent on the maintenance of the assets during the operations. Any condition to absolve the private sector provider from this risk should be countered with a minimum maintenance standard.

Resource risk

Resource risk is the possibility that the natural resources required in the operation of an extractive related project may not be of the proper quantity or quality to make the project feasible. For some projects, such as the development of natural resources and energy, these resources are critical in meeting the debt service and return on equity requirements of the project.

Although the ultimate responsibility for managing this risk lies with the promoters and other investors, due diligence efforts must be sufficient to satisfy all stakeholders, and may

include engineering and geological studies. The stakeholders must also plan for dealing with any excess natural resources.

Technology risk

This risk refers to the possibility of changes in technology resulting in services being provided with suboptimal technology.

This risk is difficult to control. However, when better technology decreases the cost of providing the services, the private sector provider will almost certainly implement such changes. Contracts may address this risk and set out a method for rectifying related problems.

E

Annexure 4: Glossary

The following glossary of terms related to project finance has been drawn from a number of sources, including:

- ***Project Finance - Euromoney/DC Gardner***
- ***Project Financing - Nevitt***
- ***Project Finance - Clifford Chance***

Acceleration: After default, the loan is fully due and payable. Repayments are accelerated to the present.

Accrual accounting: A method of accounting in which revenue and expenses are recognised when earned or incurred, without regard to timing of cash receipts.

Accrued interest: Interest earned but not collected or paid.

Ad valorem: Off the gross or stated value, usually a percentage.

Advance agent: A loan drawdown is advanced by the funder.

Agent: The bank charged with administering the project financing. Generic: A party appointed to act on behalf of a principal entity/person.

All-in: Interest Rate that includes margin, commitment fees, up-front fees.

Amortisation: Reduction of capital or up-front expenses (capitalised) over time, often an equal amount p.a. Sometimes describes repayments.

Annuity: The sum of Principal and Interest is equal for each period.

Arbitrage: Take advantage of discrepancies in price or yields in different markets.

Arranger: The senior tier of a syndication. It implies the entity that agreed and negotiated the project finance structure. Also refers to the bank/underwriter entitled to syndicate the loan/bond issue.

Asset: The physical project and its associated contracts, rights, and interests of every kind, in the present or future, which can be valued or used to repay debt.

Assignment: Grant of the right to step in to the position of a party to a contract or legal agreement.

Audit: An independent examination of the financial statements or project studies/projections.

Availability: This is the period in which the project financing is available for drawdown. A period prior to financial close may also be included.

Available cashflow: Total cash sources less total cash uses before payment of debt service.

Average life: Average for all repayments, usually weighted by amounts outstanding

Avoided cost: The capital and expense that would otherwise have to be spent if the project did not proceed.

Back-to-back LC: A letter of credit issued on the strength of another LC. The terms must be identical to those of the backing credit.

Balance sheet: The accounts that show assets, liabilities, net worth / shareholders' equity.

Balloon: A large single repayment.

BAR: Builders' All Risk, a standard construction insurance

Barter: The physical form of countertrade.

Base rate: Floating interest rates on bank loans are usually quoted on the basis of the prime

rate of the lender.

Basis point (bp): One hundred bp equals 1 percentage point.

Bearer bond: The bond certificate is itself negotiable. (It is not recorded as being owned by any particular investor.)

Best efforts: A very high standard of undertaking, nevertheless excusable in the event of force majeure or failure to execute the matter in question after trying to do so on a sustained, dedicated basis. (Under English law, "best endeavours" is a preferable term.)

BI: Business interruption insurance available once the project is in business.

Bid bond: A small percentage (1-3%) of the tender contract price is established as a bid "performance" bond. Once the contract is awarded, Bid Bonds are refunded to the losers.

Bid price: The price offered.

Blocked currency: Due to inconvertibility or transfer risk, a currency cannot be moved out of the country.

Bond: The paper evidence of a legal promise by the issuer to pay the investor on the declared terms. Bonds are usually negotiable. Bonds are customarily longer-term, say 5-25 years. Short-term bonds are usually referred to as notes.

Bond rating: An appraisal by a recognised bond rating service (e.g. Standard & Poors, Moody's) of the soundness of a bond as an investment.

BOO: Build-own-operate (and maintain).

Book runner: The arranger or bank extending the invitations for a syndication and tallying final take.

Book value: The value of an asset as reported in the annual financial statements. This value will be at historic cost less any accumulated depreciation. This value will not necessarily be the same as the market or replacement value.

BOT: Build-own-transfer where the project is transferred back to the party granting the concession. The transfer may be for value or at no cost.

Break even: The reduction of a project finance net cash flow to zero by changing an input variable such as price or costs.

Break-even-analysis: Analysis of the level of sales at which a firm or product will just break even.

Bridge Financing: Interim financing.

Broker: A party that brings together sponsors, finance, or insurances but is not acting as a principal.

Builders' all-risk: The standard insurance package during construction.

Bullet: A one-time repayment, often after no or little amortisation of the loan. A balloon.

Buy-back: A promise to repurchase unsold production. Alternatively, a promise to repay a financial obligation.

Buydown: A once-off payment out of LDs to reflect cashflow losses from sustained underperformance. Often used to "buy" down the project finance loan.

Buyer credit: A financing provided to a buyer to pay for the supply of goods or services usually by an exporting country or the supplier company.

Call: An option to buy a security or commodity for a set price at a given time in the future.

Callable bond: A bond that the issuer has the right to redeem prior to maturity by paying some specified call price.

E

Cap: A ceiling on an interest or FX rate through a swap, options, or by agreement. Capex: Capital Expenditures usually by way of direct investment.

Capital: The amount invested in a venture.

Capital budget: List of planned investment projects.

Capital cost recovery allowances: Tax depreciation allowances.

Capital expenditure: Long-term expenditure for plant and equipment.

Capital gains: Profit from the resale of assets that have been held for investment.

Capital markets: A broad term to include tradeable debt, securities, and equity as distinct from private markets or banks.

Capitalised Interest: Prior to completion, the convention is to capitalise interest into the project financing i.e. to borrow to pay Interest. See IDC.

Capital structure: The financing mix of a company, i.e. extend of leverage.

Cashflow: The generation of cash by a project.

Certificate of deposit (CD): A negotiable, interest bearing, instrument evidencing a time deposit with a commercial bank on which the bank pays principal at maturity. Large CDs are typically negotiable.

CDC: Commonwealth Development Corporation — a British development finance institute.

Charge: A fixed charge refers to a defined set of Assets and is usually registered. A floating charge refers to other assets which change from time to time eg. cash at bank, inventory, etc, which becomes a fixed charge after a default.

Claw back: The ability to recover prior project cashflow that may have been distributed as dividends to the sponsors.

Clearinghouse: Facility through which transactions executed on the floor of an exchange are settled.

Club: A group of underwriters who do not need to proceed to syndication.

Co-financing: Where the different lenders agree to fund under the same documentation and security packages yet may have different interest rates, repayment profiles, and term, perhaps via different tranches.

Co-manager: A second-tier participant, ranked by size of participation.

Coface: The French ECA.

Collar: A ceiling and floor to an interest or FX rate structured through swaps, options, hedging, or by agreement.

Collateral: Additional security pledged to support a project financing.

Commitment fee: A per annum fee applied to the portion of the unused project financing (the amount not yet drawn down) until the end of the availability period.

Common equity: Junior equity owners are the last to receive payment in the case of insolvency.

Compensation trade: The form of countertrade where an incoming investment is repaid from the units / revenues generated by that investment.

Complementary financing: Where different lenders agree to fund under similar yet parallel documentation and a pro-rata security package.

Completion: In a project financing, when the project's cashflows become the primary method of repayment. It occurs after a completion test. Prior to completion; the primary source of repayment is usually from the sponsors or from the turnkey contractor.

Completion risk: Construction, development, or cost overrun risk. The risk that a project will not be able to pass its completion test.

Completion Test: A test of the project's ability to perform as planned and generate the expected Cashflows. The time when the project can move from recourse to a project financing.

Compound interest: Interest returns are compounded by reinvesting one period's income to earn additional income the following period.

Concession agreement: An agreement made between a host government and the project company or sponsor to permit the construction, development and operation of a project.

Conditions precedent: Documentary and other conditions required to be satisfied before the borrower can request drawdown or other credit facilities to be made available under the terms of a facility agreement.

Consortium: All of the participants or developers. For the early stages of a project, it may be a loose association, not a legal or contractual entity/JV.

Constant dollar: Inflation or escalation is not applicable. Prices and costs are deescalated/re-escalated to a single point in time.

Contingency: An additional amount/percentage to any cashflow item e.g. capex.

Contingent: For liabilities, those that do not yet appear on the balance sheet e.g. guarantees, supports, lawsuit settlements. For support or recourse, the trigger may occur at any time in the future.

Convertible: A financial instrument that can be exchanged for another security or equity interest at a pre-agreed time and exchange ratio.

Cost of capital: The rate a company must pay to investors to induce them to invest in the company's equity or debt.

Cost of risk: Cost associated with the risk of a condition occurring.

Counterparty: The other participant, usually in a swap or contract and includes intermediaries.

Countertrade: One party supplies a unit / funding in return for other material/funding See Barter.

Country risk: Includes sovereign risk but usually an estimate of the likelihood of a country debt rescheduling which will prompt currency inconvertibility. Sometimes referred to as sovereign risk.

Coupon: The Interest amount or rate payable on a bond. A coupon may be physically attached to the bond certificate.

Covenant: An agreed action to be undertaken (positive) or not done (negative). A breach of a covenant is a default.

Cover: The amount above unity of a debt service ratio.

CPI: Consumer Price Index, a measure of inflation at the consumer level.

Credit Enhancement: The issuance of a guarantee, L/Q or additional collateral to reinforce the credit strength of a project financing.

Creditworthy: When the risk of default on a debt obligation by that entity is deemed low.

Cross default: A default by another project participant or by the sponsor (other than the project Financing) triggers a default.

Cross Collateral: Project participants agree to pool collateral i.e. allow recourse to each other's Collateral.

Crown Law: Law derived from English law, e.g. England, Ireland, Canada, PNG, Australia, Hong Kong, Singapore, India, Malaysia.

E

Cure: Make good a default.

Current asset: Cash or assets that can be converted to cash within one year.

Current dollar: Actual or real prices and costs. Escalation/inflation effects are included.

Current Liabilities: Liabilities payable within one year.

Current Ratio: A Liquidity ratio defined as current assets divided by current liabilities.

Cushion: The extra amount of net cashflow remaining after expected debt service.

DBSA: Development Bank of South Africa

D:E Ratio: Debt to equity ratio of a company's debt to its capitalisation. The higher this ratio, the greater the financial leverage of the company.

D:E Swap: Debt in a blocked currency is swapped for equity in a local company project, usually at a discount.

DCF: Discounted Cash Flow where net cashflow is brought to a present value using a given percentage discount rate.

Debenture: A legal security over the issuer's general credit / balance sheet.

Debottle-necking: Each transition of a project's flowsheet or sequence is optimised to increase output.

Debt: The obligation to repay an agreed amount of money.

Debt Service: Principal repayments plus interest payable; usually expressed as the annual amount per calendar or financial year.

Debt Service Cover Ratio: The amount of times the annual debt service is covered by the free cash flow generated by the project.

Deductible: An amount or period, which must be deducted before an insurance payout or settlement, is calculated.

Default: When a covenant has been broken or an adverse event has occurred. A money default occurs when a repayment was not made on time. A technical default means a project parameter is outside defined or agreed limits, or a legal matter is not yet resolved.

Default interest: A higher interest rate payable after default.

Defeasance: Some or all of the debt is cash collateralised usually indirectly or via Zero-coupon structures.

Deferred tax liability: An estimated amount of future income taxes that may become payable from income already earned but not yet recognised for tax reporting purposes.

Deficiency: The amount by which project cashflow is not adequate for debt service

Deficiency agreement: Where cashflow, working capital, or revenues are below agreed levels or are insufficient to meet debt service, then a deficiency or make-up agreement provides the shortfall to be met by the sponsor or another party, sometimes to a cumulative limit.

Defined event: The definition applicable to the trigger of a loss in an insurance policy, particularly PRI.

Demand deposit: A bank deposit that may be withdrawn by the depositor at any time without prior notice.

Depreciation: Amortisation for accounting (book), tax calculations, or income calculations. A regular reduction in asset value over time.

Derivative: A financial instrument based on an underlying contract or funding such as a swap, option or hedge.

Devaluation: Either a formal reduction in the FX rate or gradually according to FX market forces.

DIS: Delay-in-Startup insurances which can cover all non-site force majeures, change in a law and contingent contractor liability (efficacy). Sometimes called Advanced Loss-of-Profits Insurances or Advanced Business Interruption Insurance.

Disbursement: A term used in accounting and finance to indicate the actual paying out of cash.

Discount bond: A bond selling at bellow par.

Discount securities: Non-interest-bearing money market instruments that are issued at a discount and redeemed at maturity for full face value.

Discounted cash flow: A cash flow occurring some time in the future which has been discounted by a given discount factor on a compounded basis. It is the present value of a future cash flow.

Discount Rate: The annual percentage applied to NPV or PV calculations (and is often the all-in interest rate or the interest rate plus margin for project financing). The discount rate may be the WACC.

Dividend: The amount paid out per share, usually once or twice a year, by a company from its profits as decided by the board of directors.

Dividend yield: The annual dividend payment divided by the market price of a share.

Double Dip: Tax depreciation is accessed in two countries concurrently.

Double tax treaty: An agreement between two countries to avoid or limit the double taxation of income and gains.

Drawdown: The borrower obtains some of the project financing, usually progressively according to construction expenditures plus IDC.

Drop-dead: A fee payable when the underlying transaction does not proceed.

DSCR: Debt Service Cover Ratio; usually annual.

Earnings: income, net income, profit or net profit.

EBIT: Abbreviation of earnings before interest and tax.

EBRD: European Bank for Reconstruction and Development targeted at Eastern Europe and the former Soviet Union.

ECA: Export Credit Agency established by a country to finance its nation's goods, investment, and services. They often offer PRI.

Efficient market: A market in which asset prices instantaneously reflect new information.

EIS: Environmental Impact Study, which may have been subject to public comment.

Engineering risk: Design risk. The impact on project cashflow from deficiencies in design or engineering.

Environmental risk: Economic or administrative consequence of slow or catastrophic environmental pollution.

EPS: Earnings per share.

Equity: The cash or assets contributed by the sponsors in a project financing. For accounting, it is the net worth or total assets minus liabilities.

Equity kicker: A share of ownership interest in a venture in consideration for making a loan.

Escrow: Where documents or money accounts are put beyond the reach of the parties.

Eurobonds: Bonds issued in any currency issued outside a borrower's domestic market. They are commonly listed in Luxembourg. They cannot be traded in the USA. Eurobonds are often bearer bonds.

E

Eurodollar: US$ deposited with banks outside the USA.

Eurodollar bonds: A Eurobond denominated in dollars.

Evergreen: A contract that rolls over after each agreed (short-term) period until cancelled by one party.

Exchange traded options: Options traded in organised markets whose participants are committed to quoting both buy and sell prices.

Ex dividend: Without dividend.

Execute: Formal signing of documentation. Implement an action required under the documentation.

Expropriation: If the state has taken over a company or project, implying compensation will be paid. Nationalisation. Creeping expropriation occurs when a government squeezes a project by taxes, regulation, access, or changes in law.

Face value: The maturity value of a debt instrument. Also known as par value or nominal value.

Fee: A fixed amount or a percentage of an underwriting or principal.

Feedstock: The supply of raw materials to a processing or refining plant.

Fiduciary: An body to whom certain property is given to hold in trust, according to the trust agreement.

Final take: The final participation.

Finance lease: The lessor receives lease payments to cover its ownership costs. The lessee is responsible for maintenance, insurance, and taxes. Some finance leases are conditional sales or hire purchase agreements. Also known as a capital lease.

Financial close: When the documentation has been executed and conditions precedent have been satisfied or waived. Drawdowns are now permissible.

Financing agreements: The documents which provide the project financing and sponsor support for the project as defined in the project contracts. Fixed cost: Operating cost which does not vary per unit of output.

Fixed rate: Interest rate that remains unchanged for a defined period.

Float: See IPO.

Floating rate: Interest rate that fluctuates and is adjusted during the term of the loan in accordance with some index of short-term rates.

Floor: A level which an interest rate or currency is structured not to go below.

Force majeure: Events outside the control of the parties. These events are acts of man, nature, governments or regulators, or impersonal events. Contract performance is forgiven or extended by the period of force majeure.

Foreign exchange: The conversion of one currency into another.

Forex: FX, Foreign exchange.

Forward contract: Forwards. An agreement to exchange currency or interest obligations in the future. For tradeable commodities or securities, an agreement to buy or sell at a future date.

FRNs: Floating Rate Notes where the interest is reset by a panel or by reference to a market floating rate.

Full recourse: No matter what risk event occurs, the borrower or its guarantors guarantee to repay the debt. By definition, this is not a project financing unless the borrower's sole asset is the project.

Funding risk: The impact on project cashflow from higher funding costs or lack of availability of funds. Interest risk.

Future value: The value of an initial investment after a specified period of time at a certain rate of investment.

Futures market: A market where forward contracts can be traded before their maturity.

Futures: Agreements to purchase a commodity or financial instrument at a price agreed today. These are usually tradeable on exchanges or computer trading screens.

FX rate: One currency unit expressed in terms of another. Foreign exchange rate.

FX risk: The effect on project cashflow or debt service from a movement in the FX rate for revenue, costs, or debt service.

FX: Foreign exchange.

Gearing: The level of debt to equity. Interest-bearing debt divided by shareholders' equity.

General Partner: The partner with unlimited liability.

Golden Share: a shareholding interest entitling the holder to exercise a degree of control over certain activities of the company.

Goodwill: The amount paid in excess of book value on the balance sheet, usually for intangible assets such as trademarks or licenses.

Grace: After a default, days of grace may be stated within which the cure is effected. A period when interest or principal is not yet payable, usually a period after startup/commissioning/completion in a project financing.

GSM: Global System for Mobiles, a mobile phone standard.

Guarantee: An undertaking to repay debt in the event of a default. It may be limited in time and amount.

Guarantor: A party who will guarantee repayment or performance of a covenant.

Haircut: A discount.

Hedge: To take a forward contract or option to effect an anticipated change in a currency, commodity, interest rate, or security, so that gains or losses are offset.

Hell-or-high-water: An absolute commitment, with no contractual defense.

Hermes: The trade finance agency for Germany.

Hire purchase: The user of the asset is entitled to purchase the asset according to a pre-agreed method. The user may be the owner for tax purposes.

Hurdle rate: A minimum IRR.

IBRD: The International Bank for Reconstruction and Development (the World Bank).

IDC: Interest During Construction. It usually equals capitalised interest. (Do not confuse with South Africa's Industrial Development Corporation)

IFC: International Finance Corporation, the private sector lending agency of the World Bank.

Illiquid: Not easily traded or not readily converted to cash.

Incipient default: Potential default.

Income: Operating cashflows less overheads and depreciation, either before tax (BT) or after tax (AT). Earnings.

Inconvertibility: Where a local currency cannot be exchanged for another currency. Often includes transfer risk.

Indemnity: A legal obligation to cover a liability, however arising.

E

Indenture of a bond: A legal statement spelling out the obligations of the bond issuer and the rights of the bondholder.

Indexed loan: A loan with debt service repayment tied to some standard which is calculated to protect the lender against inflation or currency risk.

Indexed Rate: An interest rate linked to an index, usually the CPI.

Inflation premium: The increased return on an investment which is required to compensate investors for expected inflation.

Information memorandum: A document detailing the project and project financing usually in connection with a syndication.

Infrastructure risk: The impact on project cashflows from infrastructure problems. Sometimes labelled transportation risk.

Insider trading: Buying or selling of a company's securities by persons having access to non-public information.

Institutions: Insurance companies, pension funds, trusts, foundations, mutual funds, funds managers, bank investment departments.

Instrument: A financial tool. Sometimes a discrete type of funding or a security.

Intangible assets: Goodwill, patents and trademark valuation, deferred charges, and share/bond premiums.

Inter-creditor agreement: An agreement between the lenders to a company as to the rights of creditors in the event of default.

Interest rate: The percentage payable to the lender calculated at an annual rate on the principal. May be all-in.

Interest risk: The impact on project cashflow from higher interest costs or lack of availability of funds. Funding risk.

Intermediary: An entity standing between parties to funding or a swap. An intermediary may be at risk.

Inverse order: Applied to the periodic repayment schedule and means from the end, expected maturity. "Current order" means the next periodic principal repayment.

Investment Bank: The US term for a merchant bank.

Investment grade: For a rating, the rating level above which institutional investors have been authorised to invest.

IPO: An Initial Public Offering of shares. A float.

IPP: Independent Power Plant, a BOO development.

IRR: Internal Rate of Return. The discount rate to make the NPV zero. Multiple IRR's occur mathematically if the periodic cash flows change sign more than once.

Irrevocable letter of credit: A letter of credit that cannot be changed or cancelled without the consent of all parties involved.

Islamic Loan: Interest cannot be charged. The loan is structured using discounts, sale/lease, profit participation, or repurchase agreements.

Joint and several liability: Each is liable for the full amount of the liability, but performance by one discharges the other.

Joint Venture: JV. The legal means of dividing the project's equity either by shareholdings in a company (incorporated JV) or by way of a contract (unincorporated JV).

Junk: A high-yield bond of speculative grade.

L/C: Letter of Credit, a guarantee to pay limited to an amount and time triggered by defined events or exchange of agreed documents. Used for credit enhancement.

Latent default: A potential default that may have always been present but unidentified.

LDs: Liquidated Damages. The amount payable for delays and sub-standard performance under a construction, equipment supply, or O & M contract.

Lead arranger: The senior tier of arranger.

Lead bank: A senior bank involved in the negotiations for a project financing. Subordinate to an arranger. Lead manager.

Lead manager: Senior tier of lender in a loan syndication.

League tables: A ranking of lenders and advisers according to the amount of underwriting, final take, or number of project finance loans or advisory mandates.

Lease: The owner of an asset (lessor) agrees to receive lease payments or rentals from the user (lessee), usually at a fixed rental level. The lessor or owner takes the benefit of depreciation as a tax deduction. Its primary security is the asset.

Lease rate: The equivalent interest rate calculated from a stream of lease payments.

Lease term: The life of a lease including any renewal options.

Legal risk: A risk that a defect in the documentation will affect cashflow or debt service.

Lessee: The user who pays lease rentals to the owner or lessor.

Lessor: The owner of a leased asset.

Leverage: The level of debt expressed as a percentage of equity or as a ratio to equity. The US or Canadian word for gearing.

Leveraged lease: A lessor borrows to finance a leased asset. Recourse may be limited to the lease rentals or the asset.

Liability: The obligation to repay a defined amount or to perform a service.

LIBOR: London Interbank Offered Rate, often quoted as a 1,3,6-month rate for US$.

Lien: A legal security interest in an asset.

Limited partnership: A partnership consisting of one or more general partners, jointly and severally responsible as partners, who are not liable for the debts of the partnership beyond the funds so contributed.

Limited recourse: A financing structure in which the lender is relying to some degree on the project assets and cash flows for repayment and debt service without full guarantees from the project company or its sponsors. Under certain conditions (legal or financial), there is access to the sponsor(s)' credit or other legal security for repayment (besides the project's cashflows). There is usually recourse in the event of fraud or misrepresentation/non-disclosure. Thus non-recourse is better described as "limited-recourse."

Line of credit: A commitment of a bank to a borrower to extend a series of credits to the borrower under certain conditions up to an agreed maximum amount for a specified period of time.

Liquid: Easily traded or converted to cash.

Liquidation: The process of disposal or sale of the project or project assets with the proceeds used to repay the project financing.

Liquidity ratio: Any ratio used to estimate a company's liquidity.

Long-term: 3 years or more. Accounting more than 1 year.

Loss payee: A party to whom an insurance loss payment or settlement may be paid directly.

LP: Limited partner who is not liable for the debts of the partnership beyond the funds contributed.

Macro factors: Factors that pertain to developments in the general economy and government fiscal policy.

Maintenance bond: A bond to provide funds for maintenance and repair of equipment or a facility.

Make-up agreement: Where a product contracted to be supplied cannot be provided from a certain project, a make-up agreement provides that the product will be supplied from some other source.

Manager: A medium-level participant established according to final take.

Mandate: The formal appointment to advise on or arrange a project financing.

Margin: The amount expressed in % p.a. above the interest rate basis or cost of funds. For hedging and futures contracts, the cash collateral deposited with a trader or exchange as insurance against default.

Marginal cost of capital: The incremental cost of financing above a previous level.

Market risk: Changes to the amounts sold or the price received which impacts on gross revenue. Sometimes called sales risk

Material adverse change (MAC): An event of default designed to permit acceleration in the event of changes in circumstances which might affect the successful completion of the project, performance of covenants or repayment of loan.

Maturity: The final date a project finance loan is repayable. The end of the term. Medium term: 2-6 years.

Merchant bank: A bank which, besides lending and deposit taking (usually not from the public), engages in trading, advisory services, and as an underwriter and funds manager of securities.

Mezzanine financing: Subordinated equity.

MIGA: Multilateral Investment Guaranty Agency, the PRI arm of the World Bank.

MITI: Ministry of International Trade and Industry of Japan.

MILA: Multilateral agency such as IFC, ADB. Money market: The market in which short-term debt instruments are issued and traded. Shorter-term securities are those generally with one year or less remaining to maturity.

Monte Carlo: Simulations using random numbers.

Monetisation: Securitisation of the gross revenues of a contract.

Mortgage: A pledge or assignment of security of particular property for payment of debt. The same as an indenture of trust or security agreement.

Municipal notes: Short-term notes issued by municipalities in anticipation of tax receipts, proceeds from a bond issue, or other revenues.

Negative pledge: The borrower agrees not to pledge any of its assets as security and/or not to incur further indebtedness.

Negotiable: A financial instrument can be bought or sold by another investor, privately or via a stock exchange / computer trading.

Non-recourse: The financiers rely on the project's cashflows and collateral security over the project as the only means to repay debt service. This usually occurs after completion.

Nominal rate: A stated rate which is usually subdivided for compounding purposes, resulting in a higher effective rate.

Nonperforming loan: A loan on which interest or some payment due under the loan agreement is not paid as it accrues.

Note: An instrument recognised as a legal evidence of debt.

NPV: Net Present Value. The periodic net cashflows are each discounted by the discount rate to a present date and the appropriate cash outflows/investment for construction or acquisition are deducted from the total.

O&M: Operations and Maintenance.

Off-balance-sheet liability: A corporate obligation that does not appear to as a liability on the company's balance sheet.

Offtake(r): The purchase(r) of the project's output.

Operating cashflow: Project revenues less (cash) Opex.

Operating lease: A lease which is not a finance lease whereby the lessee uses the assets for only a portion of its useful life.

Operating risk: Cost, technology, and management components which impact opex and project output/throughput. Costs include inflation.

Opex: Operating expenses, always expressed as cash. Therefore, depletion and depreciation are excluded.

OPIC: Overseas Private Investment Corporation.

Opportunity cost: The cost of pursuing one course of action measured in terms of the foregone return offered by the most attractive alternative investment.

Overrun: The, amount of capex or funding above the original estimate to complete the project. Over subscription: Underwriting commitments from a syndication exceeds the amount sought by the amount of over subscription.

Over-the-counter (OTC) market: A market created by dealer trading as opposed to the auction market prevailing on organised exchanges.

p. a.: per annum, yearly.

Paper: Money market instruments, commercial paper, etc.

Par: Face value.

Pari passu: Equal ranking of security pro-rata to the amount owed.

Participant risk: The credit of the participants and the risk of non-performance under the project contracts or financing agreements.

Participant: A party to a funding. It usually refers to the lowest rank / smallest level of funding. alternatively, it is one of the parties to the project financing /or the project documents.

Participation: The amount of loan/bond issue taken directly or from another direct lender/underwriter.

Partnership: The partners agree to a proportional share of profits and losses and thus have the same tax treatment.

Payback: The period in years to recover the investment or loan. It may be calculated on a discounted, non-discounted, leveraged, or unleveraged basis.

Payment: The amount is that required repaying a loan with interest and fees.

Performance bond: A bond of 5-10% of a contract payable if a project is not completed as specified. Usually part of a construction contract or supply agreement.

Perpetuity: An annuity forever; periodic equal payments or receipts on a continuous basis.

Physical completion: The project is physically functioning, but not yet (fully) generating cashflow.

Placement: Securities are placed with a small group of Investors.

Point: One percentage point on a note or bond.

Political risk: Eight risks usually comprising currency Inconvertibility, expropriation, war and insurrection, terrorism, environmental activities, landowner actions, non-government activists, legal, and bureaucratic approvals. The first three are insurable. It overlaps with the political component of *force majeure* risk.

Potential default: A condition where a default would occur in time or where a notice or default event has not yet been formalised.

PPA: Power Purchase Agreement, a long-term power supply contract.

Praecipium: The amount of the front-end fee not distributed to the joining members of a syndication.

Preferred stock: Preferred equity owners have priviledges over common stockholders, but have no voting rights and are usually paid a fixed dividend.

Premium: The cost of an insurance policy. The price of an option. An extra margin payable with prepayment of principal.

Premium bond: A bond selling above par.

Prepayment: Repayment of greater than the scheduled amount. If forced, it is referred to as a mandatory prepayment.

Present value: The current value of a given future cash flow stream, discounted at a given rate.

PRI: Political Risk Insurance.

Primary market: The market for new issues during the syndication period.

Prime rate: The rate at which banks lend to their best customers.

Principal: The quantity of the outstanding project financing due to be paid. Generic: A principal is a party bearing an obligation or responsibility directly (as distinct from an agent).

Private placement: The placement of debt or equity investment is not publicised and may not be tradeable.

Pro forma statement: A financial statement prepared on the basis of some assumed events that have not yet occurred.

Pro rata: Shared or divided according to a ratio or in proportion to their participations.

Production loan: A project financing where the repayment is linked to the production.

Production: A defined portion of the proceeds of production up to a capped amount.

Project contracts: The suite of agreements underlying the project.

Project financing: A loan structure which relies for its repayment primarily on the project's cashflow with the project's assets, rights, and interests held as secondary security or collateral.

Project: The asset constructed with or owned via a project financing which is expected to produce cashflow at a debt service cover ratio sufficient to repay the project financing.

Promissory note: An unconditional promise in writing undertaking to pay a specific sum on demand or at a future date.

Prospectus: A formally approved document describing the business and affairs of the issuer and the terms and conditions of the security.

Purchasing Power Parity: A view that differential escalation rates (in different countries) determine the systematic change in FX rates.

Put: An option to sell (back) a security or commodity at a set price at a given.

Put-or-pay agreement: An agreement whereby a supplier undertakes to supply an agreed quantity of materials to the project company and to make payments sufficient to enable the company to obtain alternative supplies in the event of supplier failure.

PV: Present value where a stream of cashflows or accounting flows are discounted to the present at a discount rate.

Rating: The ranking, usually grades of A to E, of the creditworthiness/ability to repay. The ranking of bonds is related to its estimated percentage default rate. Countries are similarly ranked and may include an estimation of political risk.

Receiver: A person/entity appointed under the legal security documents to administer the security on behalf of the project financiers.

Recourse: In the event that the project (and its associated escrows, sinking funds, or cash reserves/standby facilities) cannot service the financing or completion cannot be achieved, then the financiers have recourse to either cash from other sponsor/corporate sources or other non-project security.

Refinancing: The repayment of existing debt and entering into a new loan, typically to meet some corporate objective such as the lengthening of maturity or lowering of interest rates.

Remittance: A transfer of funds from one place to another, not necessarily a payment of an obligation.

Representations: A series of statements of fact or law made by one party to an agreement on the basis of which the other party undertakes to enter into the agreement.

Reserve account: A separate amount of cash or L/C to service a payment requirement such as debt service or maintenance.

Residual Asset Value: The value of an asset at the conclusion of a lease term.

Residual cover: The cashflow remaining after a project financing has been repaid expressed as a percentage of the original loan.

Residual cushion: The amount of net cashflow from the project after the project financing has been repaid. If it is expressed as a percentage of the original loan amount, it is the "residual cover".

Residual: The assumed value of an asset at the end of a loan, lease, or proforma cashflow. It is sometimes insured.

Retained earnings: Earned surplus. Retained and reinvested in a business and not distributed as dividends.

Retention: An amount held back from construction contract payments to ensure the contractor completes the construction before the retention (5-15% of the contract price) is returned to the contractor.

Revenue bond: A municipal band secured by revenue from tolls, user charges, or rents derived from the facility financed.

Revenues: Sales or royalty proceeds. Quantity times price realised.

Revolving credit facility: A letter of credit that provides the beneficiary with a credit limit which can be reinstated to cover transactions involving repetitive shipments or needs.

Risk: The event which can change the expected cashflow forecast for the project financing. "At risk means the cash or loan. For insurance, it means the total amount or type of event insured.

Risk free interest rate: The interest rate prevailing on a default-free bond in the absence of

E

inflation.

Risk premium: An additional required rate of return that must be paid to investors to compensate them for the risk they are assuming.

Royalty: A share of revenue or cashflow to the government or grantor of the concession or license.

Sale and leaseback: A transaction in which an investor purchases assets from the owner and then leases them back to the same person.

Sales completion: The project has reached physical completion and has delivered product or generated revenues in satisfaction of a sales completion test.

Salvage value: The estimated selling price of an asset once it has been fully depreciated.

Secondary market: After the initial distribution of bonds or securities, secondary market trading begins.

Security: A legal right of access to value through mortgages, contracts, cash accounts, guarantees, insurances, pledges, or cash flow including licenses, concessions and other Assets. A negotiable certificate evidencing a debt or equity obligation/shareholding.

Securitisation: Packaging up a stream of receivables or assets to fund via a capital markets, tradeable funding.

Senior: Ranking for repayment, security, or action. Most project financings are senior debt obligations with first, senior security.

Sensitivity: A change to a cash inflow input to determine the change to DSCR.

Setoff: Money held on behalf of a borrower may be applied to repay the loan. It usually implies without the permission of the borrower.

Shareholders' equity: Net worth. Book value of total assets less total liabilities.

Short: A market participant assumes a short position by selling a commodity or security he does not own.

Short-term: Up to 12 months.

Simple interest: Only the principal earns interest for the life of the transaction.

Sinking fund: A regular payment is set aside in anticipation of a future payment.

SOE: State-owned enterprise.

Solvency: The state of being able to pay debts as they become due.

Sources and uses statement: A document showing where a company got its cash and where it spent it over a period of time.

Sovereign immunity: A doctrine under which it may be impossible to sue or seize the assets of a state or state entity.

Sovereign risk: The government's part of political risk.

Special purpose vehicle (SPV): A company established for a particular purpose.

Sponsor: A party wishing to develop a project. A developer. A party providing financial support.

Spot market: The market for buying and selling a specific commodity, foreign currency, or asset at the prevailing price for immediate delivery.

Structure: How a project financing is drawn down, repaid, and collateralised secured.

Subordinated: The subordinated party accepts a lower priority of repayment and/or security than senior debt.

Sunk costs: capital already spent.

Supplier credit: The supplier of goods or services agrees to deferred repayment terms.

Supply risk: The raw materials or input to a project change from those assumed/projected. For a resources production project, this is called reserves risk.

Swap: An exchange of the basis of obligations to repay principal, interest, or currency. For interest-rate swaps (floating to fixed), the underlying principal may not be exchanged.

Sweep: All available cash flow is used for debt service.

Syndication: The selling of a project finance to a group of prospective participants, the syndicate.

Tail: The remaining reserves after the project financing has been repaid. Sometimes means the residual.

Take-and-pay: If the project's output is deliverable and can be taken, it will be paid for.

Take-or-pay: In the event the project's output is not taken, payment must be made whether or not the output is deliverable.

Takeout: A financing to refinance or take out another e.g. construction loan.

Tenor: The number of years a loan is outstanding. The term.

Term: The loan life or tenor; the period to a loan's maturity. Generic: A condition attached.

Term loan: A loan with an original or final maturity of more than one year, repayable according to a specified schedule.

Throughput: A Throughput agreement is a hell-or-high-water contract to put and pay for material through a facility. *Force majeure* gives no relief.

Tolling: A contract to process or convert a raw material into a saleable or finished product. The tolling contract does not require the purchase of the raw material or the sale of the output.

Tombstone: An advertisement listing the sponsor, amount funded, participants, and key roles.

Tranche: A separate portion of a project financing, perhaps with different financiers, margins, and term.

Transaction advisor: A person or group of persons (firm or company) that either possesses or has access to professional expertise in financial analysis, economic analysis, legal analysis, environmental analysis, contract documentation preparation, tender processing, engineering or cost estimating. The transaction adviser assists in bringing a PPP project from the concept stage through public bidding and award to actual execution.

Transfer risk: Currency cannot be sent out of the country, usually due to central bank restrictions or a national debt rescheduling.

Trustee: An independent or nominated third party who administers corporate or financial arrangements.

Turnkey: The construction of a project to meet a standard or the completion test where it is ready to produce cashflow. Turnkey contracts usually have LDs and retentions.

Underwriting: The commitment to fund is not contingent on syndication.

Unsecured: The financier has no security, merely the obligation/undertaking to repay.

Unwind: To reverse a swap or hedge.

Venture capital: Risk capital extended to start-up or small going concerns.

WACC: Weighted Average Cost of Capital calculated from the returns on the different components of a company's or a project's deemed capital structure.

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Withholding tax: A tax on interest, royalty, or dividend payments, usually those paid overseas. It may be deducted at source.

Working capital: Cash required to fund inventories and accounts receivable. Accounting definition is current assets less current liabilities. It is recovered entirely when the project ceases.

Workout: The project financiers are responding to work out a potential problem or have arranged to take over the operation after a default to attempt to rehabilitate the cashflow generating capacity of the project.

World Bank: An MILA based in Washington DC. The International Bank for Reconstruction and Development. Usually involved in government-related deals.

Yield: The financial return, usually expressed as a percentage p.a.

Zero coupon: No interest is paid. A bond or note is issued at a discount which is calculated to yield a compound interest equivalent return.