



Everyone's Smart
University

Project Financial Management

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Lecture 9

PMG 615

Financial Structuring and Documentation (Part one)

Objectives of this lecture

This lecture examines some of the **main financial structuring issues** likely to arise once the commercial fundamentals and risks of the project, and the cash flow that results from these, have been reviewed as set out in previous chapters.

- The main elements in the financing negotiations between the Project Company and its lenders are likely to include:
 - The debt: equity ratio (past lecture)
 - The drawdown schedule for debt and equity
 - The interest rate and fees to be charged by lenders
 - Lenders' control of the Project Company's cash flow
 - Provisions for prepayment

1. DRAWDOWN OF DEBT AND EQUITY

- 1.1 PRIORITY OF DRAWING

Once the debt: equity ratio has been agreed to with the lenders, the question arises about which is to be spent first, debt or equity? Sponsors often prefer to delay putting their cash equity into the project, since the later they invest their money, the higher their IRR (because the period of time between investment and return is shorter).

Lenders would obviously prefer the equity to be invested first, or *pro rata* with the debt, but will not normally object to the debt being put in first so long as the Sponsors are legally committed to invest the equity (and will do so immediately if the project goes into default). Bank guarantees may need to be provided as security for this uncalled equity. A **bank guarantee** is a promise from a lending institution that ensures the **bank** will step up if a debtor can't cover a debt.

1. DRAWDOWN OF DEBT AND EQUITY

1.1 PRIORITY OF DRAWING (continued):

The only disadvantage of not contributing the equity before debt is that project costs are increased because of the need to fund IDC. Interest During Construction (IDC): the interest that accumulates on a loan that finances the construction of a building or development.

Certain types of projects do require equity to be invested before any debt is advanced:

- If equity is to be obtained from a public issue of shares, lenders would also not consider it prudent to rely on a future public issue, even if this is underwritten, because such underwriting commitments are likely to have unacceptable qualifications (e.g., a provision that the underwriting can fall away in certain market conditions).
- In a project where revenue is being built up gradually as investment is being made in the system (e.g., a mobile phone network), lenders set targets for how much of the system has to be built out with equity funding, and what minimum revenue levels have to be achieved, before any part of the debt is advanced. This approach is suitable when the project does not consist of building one plant, but is a continuous process of investment.

1. DRAWDOWN OF DEBT AND EQUITY

1.2 CONTINGENCY FUNDING

The Project Company needs to have contingency funding available to cover any unexpected extra project costs during the construction period. This is normally provided as additional equity and debt, usually in the same ratio as the base equity and debt. Contingency funding, if required, is drawn after the Base Case equity and debt is fully drawn.

Contingent debt and equity funding usually remains available for drawing only until shortly after completion of construction of the project. Contingent risks during operations are covered by Reserve Accounts.

2. CONTROL OF CASH FLOW

Just as during the construction period of the project the lenders only allow drawings to be made and costs to be paid when they are satisfied that these are for the budgeted and approved purposes, similarly, during the operating period, the lenders normally control the application of the cash flow of the project by controlling the way in which the cash is used.

These controls include:

- an order of priorities in applying cash, known as the “cascade”
- requirements for the Project Company to establish reserve (or escrow) accounts
- control on distributions of cash to investors
- in some cases, cash sweep or cash clawback requirements

2. CONTROL OF CASH FLOW

2.1 THE CASH FLOW CASCADE

The controls for application of cash earned by the Project Company from its revenues are set out in a cash flow cascade (or “waterfall,”) setting out the order of priorities for the use of this cash.

A typical order of priorities is:

- 1: Payment of fuel or raw material and operating costs, including the O&M Contract (based on the agreed budgetary procedures and taxes (i.e., all the costs the Project Company needs to pay to continue operating the project).
- 2: Fees and expenses due to the agent bank, security trustee, etc.

2. CONTROL OF CASH FLOW

2.1 THE CASH FLOW CASCADE (continued)

- 3: Interest on the debt and any swap or other hedging payments.
- 4: Debt repayments
- 5: Payments to the Debt Service Reserve Account, and other Reserve Accounts
- 6: Distributions to investors
- 7: Cash sweep, if any

2. CONTROL OF CASH FLOW

2.1 THE CASH FLOW CASCADE (continued)

Once all the funds required for the first category have been paid, remaining cash available is moved down to the second, and so on (like water flowing down a series of pools— hence the names for this system of cash flow allocation). It follows that if there is insufficient cash to pay the first 5 items, no cash is distributed to the investors. Items 6 and 7 are usually only paid half-yearly, during a limited time window after calculations of the Project Company's results and hence the lenders' cover ratios for the previous six months.

Revenues can flow into the cascade in two ways:

- Lenders may require the Project Company to segregate funds for the first category of costs in a separate Operating Account under the Project Company's day-to-day control, leaving the other funds in a Revenue Account under the joint control of the agent bank or security trustee and the Project Company until the other cascade payments need to be made.

2. CONTROL OF CASH FLOW

- Alternatively, all revenues may flow into one account, from which the cascade payments are made by the Project Company when required.

The latter is obviously preferable for the Project Company and generally more practical for day-to-day operations, but the lenders have to be comfortable with trusting the Project Company not to misapply revenues on a short-term basis.

It should be noted that this cascade arrangement is largely dormant during the construction of the project, when funds from equity and debt are paid into the Disbursement Account.

2. CONTROL OF CASH FLOW

2.2 RESERVE ACCOUNTS

Lenders require the Project Company to establish separate Reserve Accounts (also known as “control” or “escrow” accounts) into which various sums of money are held. Although these are in the Project Company’s name, withdrawal of funds from these requires the consent of the agent bank or security trustee, and the balances in these Reserve Accounts form part of the lenders’ security.

The Reserve Accounts provide security against short-term cash flow problems and are also established if funds need to be set aside for major expenditure in future. They also segregate funds such as insurance proceeds, which are to be used for a particular purpose. (Some of the Reserve Accounts may come higher up the cash flow cascade than shown above, depending on lenders’ views of the key priorities for cash allocation.)

2. CONTROL OF CASH FLOW

2.2 RESERVE ACCOUNTS (continued)

Insofar as Reserve Accounts are built up, the investors' return decreases, as they prevent or delay distribution of net cash flow. Assuming that the Reserve Accounts are being established anyway, the Sponsors' main concern will be that the Project Company should not be left in the position of having insufficient cash to carry on its normal business, while other cash is trapped in Reserve Accounts.

Some of the standard Reserve Accounts are:

Debt Service Reserve Account (DSRA). This account contains sufficient funds to pay the next debt service (principal and interest) installment, usually six months' worth of debt service. If the Project Company cannot pay some or all of the debt service from its normal cash flow (or a Debt Payment Reserve Account, if any), funds are taken out of this account to do so.

2. CONTROL OF CASH FLOW

2.2 RESERVE ACCOUNTS (continued)

Maintenance Reserve Account. If a project has a major maintenance cycle (e.g., the plant has to be maintained every 5 years, with most of the maintenance costs thus being incurred every 5 years rather than annually), these payments are “smoothed out” by placing one-fifth of the estimated maintenance costs in the Maintenance Reserve Account every year, and then drawing on the account to pay for the maintenance in year 5.

Tax and other “smoothing” Reserve Accounts. If the Project Company incurs a significant tax liability in one year, but does not have to pay the tax until a later year, a Tax Reserve Account is normally established to set aside the cash for this purpose. Other “smoothing” Reserve Accounts of this nature may be established to cover significant deferred liabilities or irregular costs.

2. CONTROL OF CASH FLOW

2.2 RESERVE ACCOUNTS (continued)

Insurance Proceeds Account. A separate Reserve Account may be established into which the proceeds of insurance claims are paid, and from which amounts are paid under the lenders' control for restoration of the project or reduction of the debt. Similar accounts may be used for other types of compensation received by the Project Company, where money has been received for a specific purpose, the cash does not flow through the cascade, but directly into the account.

2. CONTROL OF CASH FLOW

- **2.3 CONTROLS ON DISTRIBUTIONS TO INVESTORS**

The investors come at the bottom of the cash flow cascade; once operating costs, and all the lenders' repayment and Reserve Account requirements have been met, in principle distributions to investors can be made. (In this context, distributions includes interest or repayments on the investors' subordinated debt, as well as payment of dividends or any repayment of equity.) If the Project Company cannot immediately pay these amounts over to the investors (e.g., because there may be a delay before the annual general meeting can be held and a dividend declared), they are paid into a Shareholder Distribution Account in the name of the Project Company (which should be outside the lenders' security package).

But it is seldom quite as simple as seeing if there is any cash left over and paying it to the investors: there are other hurdles to jump.

2. CONTROL OF CASH FLOW

- **2.3 CONTROLS ON DISTRIBUTIONS TO INVESTORS (continued)**

The Project Company obviously has to demonstrate that sufficient cash will remain or be generated in the future to repay debt after the distributions have been made. This is dealt with by establishing “dividend stop” or “lock-up” ratios; for example, if the Base Case projected average ADSCR was 1.35 : 1, distributions cannot be made if the previous year’s actual ADSCR is lower than, say, 1.2 : 1. The calculation of whether there is sufficient cash to make distributions is usually carried out once every six months (and hence distributions are only made every six months). If cash flow cannot be distributed because dividend stop ratio requirements are not met, any cash available may be used to reduce the debt or held in a special Reserve Account, until the cover ratio calculations again fall on the right side of the line after allowing for the debt reduction or funds held in the special Reserve Account.

The Project Company will have to fulfill further requirements before making distributions, in particular no event of default should have occurred under the Project Contracts or the financing documentation.

2. CONTROL OF CASH FLOW

2.4 CASH SWEEP

In some projects a cash sweep may apply; after an agreed-upon level of distribution to the investors, the balance of the cash flow is used to prepay the debt or split between prepayment and a further distribution to the investors. Thus, if the project performs according to the agreed Base Case, the investors will receive the Base Case return, but cash flow from the project above this level is split between investors and debt repayment.

This approach is normally used if there are likely to be substantial fluctuations in cash flow (e.g., because of commodity price movements), and the lenders wish to ensure that some of the surplus cash generated in good times is used to reduce debt and so provide a buffer against a downturn.

A cash sweep is also very useful as part of a package of measures dealing with problems that lenders might otherwise have with the total length of the financing, or because they are concerned about the “tail” risk. In such cases most or all of the cash flow generated after debt service is not distributed to the investors, but is used for debt prepayment, or placed in a Reserve Account.

2. CONTROL OF CASH FLOW

2.5 CASH CLAWBACK

If there is some uncertainty about future costs (e.g., a major maintenance) or revenues, lenders may still be prepared to allow investors to take cash distributions out of the Project Company, provided a clawback undertaking is given. Under such an undertaking, the Sponsors agree that if the possible future cash flow problem develops, they will repay or lend to the Project Company up to the amount they have received in dividends or other distributions over a set period of time.

2. DEBT PREPAYMENTS AND REFINANCING

A cash sweep is a form of mandatory (compulsory) prepayment of the loan by the Project Company. Other mandatory prepayments are normally required:

- If the Project Company realizes cash from the sale of assets (unless the cash is used to replace the asset)
- If performance LDs (Liquidated Damages) are received from the EPC Contractor (prepayment is made to the extent necessary to maintain the lenders' cover ratios; any surplus LDs flow into the cash flow cascade—note that delay LDs flow straight into the cascade)
- If insurance proceeds are not applied to the restoration of the project.

In these cases, the cash is applied directly to prepayment rather than passed through the cascade.

2. DEBT PREPAYMENTS AND REFINANCING

A mandatory prepayment of the loan is required if it becomes illegal for the lenders to continue with it; this is usually meant to cover the possibility of international sanctions against the country in which the Project Company is located.

The Project Company may also wish to reduce or prepay part or all of the loan voluntarily:

- The total funding raised may not all be needed.
- Cash distribution restrictions imposed by the lenders or for other reasons may make it cost effective for the investors to prepay part of the (expensive) debt rather than have funds trapped in the Project Company. Bank lenders should normally accept prepayment of part of the loan once the project is in operation: the only exception to this may be with a public-sector lender, for whom unexpected payment of part of the loan causes problems with the internal bureaucracy. Breakage costs need to be covered. Partial prepayment is not normally allowed in bond issues.

2. DEBT PREPAYMENTS AND REFINANCING

The Project Company may also wish to reduce or prepay part or all of the loan voluntarily (continued):

Provided that surplus cash flow can be distributed, application of prepayments in order of maturity is most beneficial to investors, since this releases the cash for future distributions more quickly. This approach is the fairest if the **Project Company** has made a free choice to prepay the loan because of temporary constraints on distributions to investors. **Lenders**, on the other hand, may wish to reduce the average life of their loan, and hence their risk on the project, by applying prepayments in inverse order of maturity.

-The Project Company may wish to prepay the whole loan and refinance it on more attractive terms elsewhere.

Reference:

Principles of Project Finance

By:E.R. Yescombe

First edition

This lecture taken from chapter 13