Basic Concepts of Project Financing

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ABSTRACT

Project financing is a specific financial arrangement for a selected project. Project involves construction of an engineering undertaking. Repayment can be arranged in the form of installments of fixed payments over periods of time after the project is completed. There are two types of project financing: non-recourse and recourse.

INTRODUCTION

Project financing is a specific financial arrangement for a selected project. Project involves construction of an engineering undertaking (bridge, nuclear power plant or tunnel). It is in the form of an open credit or complete finance throughout the life of the project. Repayment can be arranged in the form of installments of fixed payments over periods of time after the project is completed. Basically, there are two types: non-recourse or ‘true’ project financing; and recourse or “Credit Supported” financing.

PROJECT FINANCING (NON-RECOURSE)

Project financing without recourse is also referred to as pure project financing. In this form of financing, repayment of the interest and principal of the loans solely depends on performance of the project operation. The lending bank acquires property right of the project assets as collateral for the loan. The lending bank will have no recourse to the sponsor of the project if the project fails to be completed or suffers operational losses; or if its assets or proceeds are inadequate to repay all the loans.

In this form of financing, with operational revenue stream of the project as the source of repayment and property right as guarantee, the lending bank also requires a third party to guarantee the loans. Thus the lending bank has recourse to the third party guarantor. However the guarantor is only liable to the amount of guarantee. So it is referred to as project financing with ‘recourse’. In general, the duration of project financing is longer than 3 years or above.

Required documents composed of approval of the feasibility study report issued by related government authorities; approval of the environment authorities; a copy of the business license; construction land planning permit and project planning permit; purchase and sale contracts; material supply contracts; completion guarantee; plan for overspent costs; transfer of insurance interests; mortgage of construction in progress; and pledge of the shareholders’ equity right.

As for the roles of banks in project financing; they act as financial advisor of the project and do the evaluation of the project in all aspects so as to propose alternative sources of funding, e.g. partly or fully funded by shareholders’ funds or bank financing.
PROJECT FINANCE ADVISORY: PRODUCT PROFILE

Objective and Scope

As financial advisor and exclusive representative of the customer, the bank can provide assistance in all aspects of the proposed transaction from project conceptualization to fund-raising. The role of the bank in such an assignment can be similar to that in a joint venture assignment, as many projects are undertaken through the mechanism of a joint venture. Hence many of the aspects are the same.

A project finance advisory proposal letter can be fairly lengthy as it is appropriate to include a description of the proposed project. The description of the project serves to facilitate understanding of the bank’s role while the other information demonstrates that the bank has the resources and expertise to assist in all aspects of the proposed project, not only those related to corporate finance.

Hence the terms of the bank’s reference for this type of transaction could include the following:
1. Undertake a feasibility study to confirm and establish the viability of the project, with particular emphasis on the financial aspects.
2. Devise the optimum structure for the project and identify potential partners, if appropriate.
3. Implement the project by approaching selected partners, by negotiating and by structuring the terms and conditions.
4. Assist in debt and equity fund-raising.

METHODOLOGY

This type of transaction is normally divided into two phases depending upon the specific characteristics of the project. The first phase is mainly directed towards investigating the viability of the project and identifying suitable partners. This can include establishing the attitude of the host Government towards the intended investment, as knowledge of the local regulatory environment could significantly affect the approach and structure of the project. The second phase would be concerned with implementing the proposed project.

Phase I: Establishing of Project Parameters

The approach in this phase can include, but not necessarily be limited to the following procedures. To identify the customers’ objectives by assisting in the development of investment criteria including preferred size of shareholding, return on investment, management role, etc., as appropriate. This could include identification of the roles and responsibilities of the customer and alternative project structures. If joint venture partners are required, the bank would be able to establish a profile of the required, possibly including their marketing strength, financial strength and industry position.

It is appropriate to meet with the appropriate local government body in order to develop an understanding of the general policy in the relevant area and their attitude towards specific project. Also it is important to review the financial and economic feasibility of the project and refine the project parameters. This can include review of project economics, analysis of financial projections and refinement of these projections through computer modeled sensitivity analysis. Local regulatory constraints would be factored into this analysis. The projection of balance sheets and cash flow statements of the project as well as a review of the impact of financing alternatives can be included.

It is followed by developing the project’s financial plan and cash flow. It needs to assist in the development of alternative structures for the project, having regard to the legal and tax ramifications as
well as to the customer’s objectives and advising on the optimum structure and with counsel develop the legal aspects of the project feasibility study. The bank has to prepare a confidential information memorandum which fully describes the project background, structures, scope, financial considerations and detailed projections that demonstrate the project viability as well as introduce the customer, its recent history and existing management and other aspects, including the business environment. This document can be used either to assist with fund-raising activities or with the identification of joint venture partners.

The bank has to undertake the search and identify candidates. This search will be tailored to investment parameters but can take the form of a comprehensive market survey which culminates in a written report and formal presentation. All projects of the relevant business sector, profiles of the major potential candidates and information on the regulatory environment as applicable to a foreign entity entering into such an investment, would be included. It is important to arrange meetings with each group to determine their potential interest in the proposed venture on a no-names basis and to undertake a formal presentation to the customer which summarizes the findings in this phase and provides recommendations regarding the next stage.

Phase II: Implementation

The bank’s approach in this phase is similar to that for Merger & Acquisition transactions, and can include the following steps. To develop a strategy and procedure, in conjunction with the customer, for making formal approaches to the prospective joint venture partners. And to contact the agreed list of potential partners and introduce the project and customer on a confidential basis, presenting the information memorandum. The bank would follow up with in-person meetings with those investors expressing interest in pursuing the transaction further. Through the information memorandum and the project meetings with potential partners, the bank will have the opportunity to fully explain the project and the proposed joint venture.

It is then followed by arranging preliminary meetings between principals and with authorities as may be necessary and act as advisor in them, if required. It is important to assist in negotiating and structuring a satisfactory joint venture agreement, providing legal and accounting advisors. The bank advisor needs to attend negotiations and actively participate on behalf of the customer and to advise on all matters related to the closing from the drafting of the memorandum of understanding to the contact stage, including due diligence. Finally, the bank has to coordinate financing (debt arrangement if normally a separate transaction with a separate fee arrangement).

FINANCIAL ROLE

Arrange syndicated loans or club deal to financing the project directly in part or in whole.

Advantages of Project Financing to Sponsor(s) / Borrower

• Keeping the debts off the borrower’s balance sheet, i.e. arising from borrower’s guarantee for the project liabilities.
• Entirely escape liabilities after all units have been sold in building project, i.e. the project company will be wound up voluntarily. After dissolution, the purchasers of the units are difficult to claim against the project company.
• Economies of scale, i.e. a number of sponsors join together to form a project company to launch a project.
• Facilitates the subsequent participation in the project by others, i.e. a process easily achieved by an issue or transfer of shares in the project company.
• Risk and isolation and spreading.
• Less cost incurred, i.e. under most Stamp Duty Ordinances, on a transfer of shares in a project company, the stamp duty charged is less than that charged in respect of the transfer of interests in land.
• Reducing regulatory and legal restrictions and costs, i.e. overseas bank may take part in project financing in part and then gives valuable opinions.

Disadvantages of Project Financing to Sponsor(s) / Borrower
• Time-consuming, e.g. negotiate and discuss the terms of complex documents.
• High interest expenses, e.g. high risk and high return yield, etc.
• Legal and administrative costs.
• High gearing.
• No earnings distribution unless bankers’ consent.
• No other external financing other than funding by shareholders of the project company and this project financing.
• No other business can be engaged except the development of the project.
• Revenue generated directly or indirectly from the project is under control by the bank(s) and only applies towards for funding for completion of the project or prepayment of the debts of project financing.

Advantages of Project Financing to Banks
• Having security over the assets of a single company is less complicated than having security over the assets of the sponsor(s) which may already be subject to a prior floating charge.
• If default, the bank(s) may prefer to continue the project development instead of realizing its assets, e.g. half-completed.
• If default or other material adverse events occurred, the bank(s) can easily assume managerial control in the project company through share mortgage of the project company.
• It can establish banking business with the sponsor(s) through commitment of project financing in part.
• Diversification of loans portfolio.
• Building up good image in financial market.

Disadvantages of Project Financing to Banks
• High risks, e.g. political risk, market risk, natural disaster risk.
• Without or limited recourse to sponsor(s)’ assets beyond the project company.
• Repayment source of the project financing is exclusively from the revenue of the project.
• Lengthy loan period.
• Indirect credit support, i.e. the sponsor gives the credit support of the project by the way of the guarantee only.
• No cash flow of the project company during the development stage of the project.
• High administrative costs, e.g. commercial, technical and legal elements and require the opinions of the relevant expertise of such specialists such as engineering information and legal advice.
Evaluation of Risks

• Operating Risk – technical
  Require skill proven technology. Unforeseen technical problems in the construction process which cause delay and time overrun.

• Operating Risk – cost
  Require funding undertaking signed by the sponsor(s). Low profit margins caused by the competitive bid process, intense competition which forces cut throat pricing and in some cases loss making contracts.

• Operating Risk – management
  Track records and provide share mortgage of the borrower. Firms which can demonstrate management experience in all facets necessary to success in construction and contracting: engineering competence, management strength, marketing, finance and logistics.

• Participant Risk
  Credit review against the sponsor(s). Small and medium local contractors with a poor past record and lax control on their cash flow positions should be avoided.

• Completion Risk
  Require completion support letter and undertaking and sponsor’s guarantee. Large multinational construction firms or contractors with proven track records should be targeted.

• Legal Risk
  Seek legal opinion. Legal terms of contracts and consequent contract variation negotiations and litigation due to disputes over quality of materials or workmanship can again result in severe cash flow difficulties.

• Cash Flow Risk
  Prepare cash flow projection within the life of loan period. Financial difficulty or slowness to pay by the employer or main contractor causes slowdown or stoppage of payments. Financing against retention monies is not accepted.

• Country Risk
  Review the country rating and its GDP. High sensitivity to business and economic cycles are foreseen.

• Project Internal Risk
  Assess the cash-inflow and revenue to be generated from the project and put down the debt and interest covered ratio in order to ensure that the reserve account has sufficient balance to pay off the coming installment repayment and interest payment.

TYPES OF DOCUMENTATION

Required documents composed of loan agreement; guarantee(s); funding undertaking and completion guarantee; subordination agreement; share mortgage; floating charge; first legal mortgage over the project; insurance assignment; management contract assignment; construction contract assignment; and take and pay agreement. It is an agreement whereby a buyer from a project commits that they will take a certain amount of the output of the project.
Key Features of Long Term Decisions

The following five aspects of long-term decisions make them qualitatively different from short-term decisions.

1. Time Scale: The time period affected by the decision may stretch into a few years or may be over decades. Example such as computerized on-line bookings for recreational and sports facilities, replacement of computer technology by an insurance company’s call center and Roll Royce’s investment in new generation aero engines.

2. Strategic Direction: Long-term decisions are signs of the firm’s strategic intentions. Strategies are long term planning.

3. Inherent Uncertainty: The longer the time scale, the greater will be the uncertainty surrounding the outcomes of any decision. Long-term decisions contain high levels of uncertainty and risks.

4. Relevant Cash Flow Analysis for Long Term Decisions: The objective of a company is to maximize shareholder wealth, which can be achieved through investments that maximize future cash flows, thus providing both strong dividend streams and growth in share prices. Relevant cash flows form the basis of financial evaluation for long term decisions.

5. Time Value of Money: Very few decisions have all relevant cash flows in the same time period and there needs to be some way in which we can acknowledge the different time periods involved in long-term decisions. For this we need an appreciation of the time value of money (Rouse, 2002).

CAPITAL FINANCE

Capital finance generally involves lending specifically for the acquisition of plant, machinery, property and other fixed assets. The bank normally limits the repayment period for this type of finance to three years. If a repayment period of more than 3 years is required by the customer the business should be passed on to a subsidiary, where possible. (Rouse, 2002). The main points that need to be considered are:

1. The Purpose of the Acquisition: Is it for asset replacement or increase to fixed assets? If the latter, ensure the market earnings potential justify the purchase of the asset. If the former, query as to why no provision has been made for financing.

2. Cost of the Asset: Consider if the cost will have serious adverse effect on the company’s balance sheet. Ensure the amount required from the bank is reasonable compared to what the company is contributing.

3. Repayment: Ensure that the company can finance repayment comfortably.

4. Skill and Resources: Ensure that the company has the skill and resources to use the new assets effectively.

5. Debenture: Consider taking a debenture with a fixed charge over the asset, if the customer is a limited company.

The facility must be granted by way of a loan. The requests for capital finance may lead to an increase in production capacity, and hence to a need for more working capital finance.

CONSTRUCTION AND CONTRACTING

The construction and contracting industry comprises two major segments, namely, building construction and civil / infrastructure works.
Building Construction and Contracting

Building construction involves relatively standard skills and hence accommodates many players. Due to economies of scale and the ever increasing standard on safety, quality and environmental concerns, larger contractors are better positioned than their smaller counterparts. On average, building construction usually takes two to three years to complete. Keen competition for private contracts is expected to persist and margins to remain thin.

Civil and Infrastructure Works

As higher level of skills and expertise are required for civil / infrastructure works, the market operates as an effective oligopoly dominated by a few larger players. Entry barriers are especially high for this category. Private investment in civil engineering and infrastructure works are expected to surge in China. Mainland China is presently embarking on an aggressive housing reform to build a large number of low-cost urban housing projects. This presents opportunities for contractors with a track record on the Mainland.

The contractor is a manufacturer of a unique, one-of-a-kind product that takes a long time to build and construct, so much of a contractor’s working capital is tied up in its large, slow-turning, construction-in-progress inventory. Operating cash flow is heavily dependent upon the contractor’s ability to assemble the proof of the percentage of work accomplished in form and content satisfactory to the owner. These monthly progress billings are the source of cash the contractor uses to pay for labor and materials, and to service debt.

Another challenge for the contractor is that many jobs are on a bid basis. In effect, the contractor bids a price before the costs of producing the product are known. Therefore, the accuracy of job cost estimating and the success in bidding and managing contract terms combine to eliminate poor estimators and bad negotiators over time. The long term winner in contracting is someone who can consistently bring in projects on time, on budget, and consequently, at a relatively low gross profit margin.

CONTRACTOR FINANCE

Contractors, whether in the civil engineering or building sector, usually require substantial finance and will often find it impossible to complete a project from start to finish without assistance from banks. In providing finance of this type the main considerations are the standing of the employer, whether he or she has the ability to pay the contractor; the number and standing of the sub-contractors, in the case of a sub-contract; and the terms of the contract. They must be carefully studied as they will help to decide whether the contract is a reasonable one to undertake, and they also have the relevance on the finance required and will provide for the frequency with which progress payments are made. Other relevant point needs to be considered include the contractor’s ability to complete the work properly and on time. Have they the previously completed a project similar in size to this one? The amount of finance required and whether it is sufficient. This can be determined from cash flow projection which the contractor must be asked to produce.

For other banking facilities to contractors, only short term working capital finance, preferably with control over the operating account and assignment over contract monies, should be considered. Apart from funding facilities, ample opportunities exist to cross-sell other products such as bonding, insurance, capital equipment leasing, interest rate and currency hedging, cash management, asset management, debt / equity issuance and underwriting facilities.
The analysis of a contractor should be aimed at the same goal as the analysis of any other borrower, to gauge the ability of the contractor to repay their existing and proposed obligations from cash flow, collateral and guarantees. The following issues should be assessed:

1. **Type of Contractor.** Is the borrower a general contractor or a subcontractor? Generally, the former have stronger financial statements than the latter, and they are one step closer to the source of payment for work performed.

2. **Management.** Who are the principals? How long have they been with the company and in the industry? What is their experience, skills, training and education?

3. **Construction Supervision.** Does the company assign a manager to each job or assign multiple jobs to its project managers? Closer supervisor tends to keep projects on time and on budget.

4. **Site Visits.** Visit some of the significant jobs. Compare what you see with the most recent percentage of completion. Does the job look 55% complete? If not, ask how the figure was derived.

5. **Customers.** What percentage is public works and what percentage is private work? Most public jobs are bid, so the gross profit margins tend to be lower and the administrative requirements higher. However, public jobs tend to be large, so the gross profit dollars are attractive. The lower gross margins also reflect the lower risk perceived in government work, and the fact that in normal circumstances the government pays on time. However, contract variations can slow up payments disproportionately.

6. **Billing Policies.** How frequent is each job billed? Which jobs are under-billed or over-billed? Contractors like to “front-end load” their billings, that is, bill more, relative to costs early in the contract; however, this over-billing process can leave the contractor short of billable revenue to pay the remaining costs to complete the contract.

7. **Fixed Assets.** Examine the equipment for maintenance, upkeep and orderliness. What are the company’s trends in equipment downtime, repair expense and maintenance expense? Sloppiness, deferred maintenance and poor record-keeping divert cash flow away from repayment.

8. **Financial Condition.** How much of the contractor’s net worth and profits are derived from jobs in progress? Are we comfortable with the contractor’s track record in estimating accuracy as we review the company’s cash flow projections? Declining gross margins on jobs-in-progress usually indicates productivity problems caused by ineffective management.

9. **Red Flags.** Besides the usual analytical factors, it is worthwhile to assess the contractor by using the following list of red flags, events, or trends typically associated with troubled contractors:
   - Poor estimating and job cost reporting e.g. cost overruns, late reports, declining backlog.
   - Onerous contract terms e.g. can sometimes be seen from banking requirements.
   - Poor project management e.g. high labor turnover.
   - No comprehensive business plan e.g. fast growth, entry into new areas of expertise, new geographic market, rapid increase in project size.
   - Poor financial management e.g. cash flow problems, extraneous equipment.
   - Factors beyond contractor’s control, e.g. weather-related delays, stoppages, economic recession.

10. **Repayment Ability.** Contractor assets and individual guarantees are weaker secondary sources of repayment than in many other lines of business. Consequently, repayment ability should indicate the ability to repay on both a most likely cash flow projection and a downside cash flow projection. If the downside projection forecasts insufficient cash available to service debt, then additional collateral, guarantees, or other credit enhancement is necessary to support the credit extension. When financing contracts, the facilities should be drawn / repaid according to the cash flow projection and project progress report, with an assignment of contract / proceeds and a charge over operating account(s).
When providing non-project specific finance, we should see contracts on hand (newly acquired and their outstanding), capability (contract value can be completed each year), updated estimate of the contracts, cash flow projection (in aggregate).

12. **Covenants and Conditions.** All of the following are to be incorporated into credit extensions to contractors:
   - No change in ownership or control without the bank’s approval.
   - Subordination of any related part debt, both in principal and interest payments until the bank’s commitment is extinguished.
   - All facilities provided by the bank are to be cross-defaulted and cross-collateralized.
   - Financial statements must include balance sheet, income statement, cash flow statement, debtor / creditor analysis and contract status report.

**CONCLUSION**

The bank needs to know the amount of their own money the contractor will put up. This should not be less than 25 percent of the actual expenditure or less than the retention money. Finally, the degree of security afforded by the employer’s payments must be assigned to the bank in the most comprehensive form possible. The assignment must also be acknowledged by the employer. As far as the bank’s procedure is concerned, it is necessary to take legal assignment of all contracts moneys. If possible, take usual guarantees and other securities. It is required to open a separate loan account for each contract. Drawdown can then be debited to the loan account at various progress stages. This will be able at any time to obtain the following information such as contract price; work completed and paid for; work completed but not yet paid for; work in progress; ‘retention’ progress; and balance of contract price.

**REFERENCES**