

## Project Finance

### 1. What is Project Finance

In the fund raising for project, a project finance is a financing method which does not rely on the credit-worthiness of the corporation or the value of collateral, but on the viability of the project or the cash-flow to be generated from the relevant project.

In the middle of 1990's, Japanese financial institutions began to offer project finance for the infrastructure constructing projects in Asian countries.

Since the late days of 1990's, even in Japanese domestic field, project finance was adopted and pervaded to the various projects such as industrial waste disposal, wind power generation, hospital construction, tall road, airport construction and factory construction.

And though some part is overlapped, the PFI, born in UK, was introduced to Japanese market in the late days of 1990's, in which the project financing was applied as a tool of a fund raising.

As financing not to "corporate" but to "project", the project finance have the following salient features (quoted from "theory and practice of the project finance" Edward Jascom 2006 Kinzai Institute For Financial Affairs, Inc. pp11. But the features of the project finance do not limit to the followings.)

- (1) The project finance shall be arranged in the manner of tailor-made and each case is distinguished to be very individual.
- (2) The principal of the project accepts various legal and financial conditions imposed, in such context, the project finance is regarded as an "enclosed" financing method.
- (3) Non-recourse (finance is arranged solely to project and it is usually impossible for the lender to claim to the project sponsor.)
- (4) The lender makes credit decisions by evaluating the cash-flow to be generated from the relevant project.
- (5) In a usual case, a high leverage( pursuit of a leverage effect and /or tax benefit)
- (6) The finance scheme is arranged so that a full payout of the borrowing shall be assured within the pre-determined period.
- (7) The principal collaterals are various contracts entered by, authorizations and licenses of, ownership of natural resources of the project company. Should the project company fall into default on the terms and conditions under the finance contracts, then the whole assets owned by the project company shall be sequestrated. Provided that, it is very likely that the total amount recovered through the assets sales may be far short to the whole amount of debts (smooth operation of the project and the assets value is inseparable and once the operation halted, the assets likely fall to be valueless)
- (8) No implicit presumption of going-concern, or repayment of debts by way of re-borrowing

As afore-mentioned, since the project finance is extended to the “Project” but not to “Corporate”, the credit rating will be provided to the loans or bonds (project bonds) but not for a rating of long term senior debts.

## 2. General Scheme

At first a special purpose company (SPC), which carries out the project, shall be incorporated by the project sponsor. In a typical case, the SPC shall raise a fund independently from the project sponsor and the SPC shall pay-out the debts over 10~30 years with the cash-flow generated from the project.

Depending on a project or purpose of fund, some cases will be arranged for the period of 3 to 5 years. The resources of repayment stem from the cash-flow of the project and the cash-flow of the SPC shall be applied in the pre-determined payment order under the contracts to the various payments and expenses including the repayments of debts.

Having evaluated the project’s viability over the middle-long term and the risks in advance, the related parties (project construction material supplier, sales clients, operator, insurance companies, banks and etc) shall carefully design and arrange the project scheme along with the negotiations among the related parties for the effect of that the project will be carried out without any hitch and delay by a proper risk-sharing among the related parties.

And as the project life prolongs for a middle-long period, not only an arrangement of scheme but also monitoring immediately after the start-up of the project as well as administration for post period shall be very important.

In case the project starts by constructing facilities, at each stage of the project, such as start-up, under-construction, completion or operation, the risk profiles and participants may change along with the progress of the project.

## 3. Analytical Point

The analyses are composed from the following elements. Qualitative and quantitative analyses shall be conducted and a synthetic overall judgment will be made by taking account of the specific individuality of the project. For instance, DSCR (Debt Service Coverage Ratio) and ICR (Interest Coverage Ratio) is an important index however it shall be invalid as an analysis unless such index has to be examined together with a volatility or sustainability of the relevant cash-flow.

As the first step of analysis, intensive examinations about the project’s viability weigh an important part of analyses.

### (1) Intensive examinations of the project’s viability

Feasibility (Market, competition, substitutive products, technology assessment, establishment of a business flow throughout the project life from the start-up, legal, political situation, users’ situation or profitability(IRR etc) and its stability /sustainability)

(2) Assessment of the sponsor

Special operational know-how of the sponsor, patent, control of sales channel, and relationship with clients. It also examines whether the sponsor has a will or capability to support the project in time of need.

From the same view points, it is assessed that if there is possible candidates of substituting operator other than the sponsor and about their capability. But it is not always indispensable to appoint the substitute of operator in before hand.

(3) Intensive examinations about the risk profiles of each stage of the project and counter measures against such risks

Namely, construction delay risk, cost overrun risk, operational risk (operation of the facilities, repair or maintenance of the facilities), risk arisen from the wastes, market risk (price of raw materials, fluctuation of products price, fluctuation of demand for products), risk relating to the economy of the project (prospect of cash-flow, capability for payment of principal and interest), Force Majeure risk (but not limited to those).

(a) Start-up risk and its counter measures

The cash-flow is not always stable for a first few years immediately after the start-up of the project or a substantial amount of additional investment is required

To diminish the above risks for a start-up period, the following points shall be carefully examined so as to ascertain enough flexibility of fiscal position, e.g. repayment schedule, establishment of cash reserve account, obtaining of borrowing facility for working capital, procuring insurances.

(b) Assurance of sustainability of the project after the start-up

In case the operation by the initial operator stays to be lower than the assumption, the following points shall be examined, e.g. Monitor for revising the project at early stage, strengthening the control by the lenders (draw-up management improvement plan, stop the dividend payment, restrictions of the capital investments, alteration of the operator and etc), obtaining liquidity and loan facilities for the case of the increase of the working capital.

(c) Verification of trigger level and incorporating covenants in light of the character of the project or features of the operation

Taking account of the specific features of the individual project, examine the necessity of covenants or trigger level.

(4) Securities package

(a) Burden sharing (risk allocation)

(b) Financial plan (structuring) refer to (5)

(c) Contracts

(d) Securities Package

Being coherent, keeping integrity, monitoring, pledge of collaterals (CF, contracts, tangible assets, management right of SPC and etc), and measures to remove SPC from the risks other than the relevant project

(5) Analysis of the financing structure and finance model

Having based on the finance model (fund revenue and expense projection table), the following points shall be analyzed, e.g. cash flow generation, a corresponding relation between the presumed risk factors and cash flow or its impact.

As the degree of individuality is strong, it is necessary to pay attention if a combination of the most suitable indices is selected.

(a) Examination of the risk versus the finance, i.e. tranche structure (senior, mezzanine, equity) and balance to each others

(b) Examination of the cash-flow based on the financial model (fund revenue and expense projection table)

(c) Consideration of the events occurred in the past or under the stressed situation based on the hypothetical scenario (Stress Test). Under the stressed situation, evaluating the magnitude of the impacts which was caused to the cash-flow, the reserve account or the each index.

(d) In case plural numbers of scenario are expected, analysis of the financial model shall be conducted for every scenario.

(e) Analysis by Index

- IRR, DSCR, ICR, LLCR
- EBITDA, FCF, Absolute value of the Capex and its transition
- Debt/EBITDA, Debt/FCF, DER
- Analysis of unit price and quantity
- Rate of operation, Break-even point
- Assets value, LTV, the transition and variation of those

(6) Monitoring

If the start-up of the project delays, it is difficult to recover such delay in the later days and an additional input of substantial amount of work forces or resources shall be required. Therefore a smooth start-up of the project is crucial (“Well begun is well done”).

Though a regular monitor shall be continuously conducted as to the rated project, it is important that a neutral third party including credit rating companies shall separately monitor the project at every stage along with the progress of the project.

#### 4. Rating Process

- (1) Organizing an analyst team for each case of project (project evaluation, assessment of market, scheme and legal matters, assessment of tax, assets evaluation, cross-border or not and etc)
- (2) Assessment of the specific feature of the project and capability of the sponsor. Analysis of cash flow model for every scenario
- (3) Presumption of the risks and counter measures at every stage over the construction period, such as initial start-up, middle of construction period and completion date, shall be verified
- (4) Examination of the scheme and how the scheme is durable with respect to the legal or tax matters
- (5) Assessment of the scheme if specific features of the project are taken into account, verification if the trigger is valid, analysis of the stress scenario
- (6) Interview with the staff in charge of operation or on-site inspection of the manufacturing facilities if necessary
- (7) Synthetic evaluation by the rating committee and determination of details of monitoring item. Based on the specific features of the project, the evaluation shall be made with a proper combination of a qualitative assessment and a quantitative assessment
- (8) After assigning ratings, commencing monitor, conducting interviews with the staff in charge of operation or on-site inspection of the manufacturing facilities if necessary. Call a rating committee to review the rating

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