Unpacking Investment Banking

Project Finance Pitfalls and Mitigants

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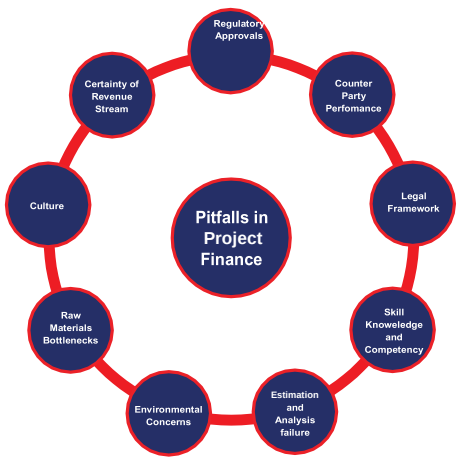
Introduction

In the last article, we discussed the basic framework of project finance transactions and we established that for project finance transactions to be successful, various parties need to assume risks in the project that they are best suited to manage. Project finance transactions are normally long term, whose execution requires exhaustive and meticulous planning to avoid project failure or cost escalations that may render the project uneconomic with potential losses to the project funders or implementing partners. Potential losses and costs arising from negligence and oversight can be quite significant for the various parties in the project. In this article, we shall discuss potential pitfalls that may ameliorate against the success of a project finance transaction.

The failure of a project finance transaction is usually reflected by symptoms that include budget overruns, failure to meet delivery schedules and quality flaws. The chart below summarises some of the pitfalls often encountered in project finance.



Regulatory Approvals

A common pitfall in project finance relates to commitment of financial resources to a long term project before all necessary regulatory approvals and licenses have been granted. It is important to ensure that a project has received all necessary approvals from the government, local authorities and approving agencies before significant resources are invested in further development of the project.

In Build Operate and Transfer arrangements or such other projects in which Government has a stake, notably utilities such as roads, power, and water, it is equally important for promoters to secure undertakings from the government that there will be no material change in industry regulations and introduction of laws that will impact on the viability of the project. Although this is a di cult undertaking to obtain from a government, a commitment to policy consistency by a government is an important and positive indicator for any investor in an envisaged project. The pitfall however arises when significant investment is made in a project, whose host country/regulatory authority is quick to change regulations that afect the operations of a project.

One case of safeguarding against government intervention in transport pricing regimes is illustrated in the Gautrain project in South Africa. The Gauteng Provincial Government provided a Patronage Guarantee which efectively gave an undertaking that the government would provide subsidies to Gautrain in the event that regulation or price controls on public transportation were introduced. Furthermore, the Patronage Guarantee provided a government undertaking that, should passenger numbers consistently fall below expectation, the government would provide subsidies to enable Gautrain to breakeven.

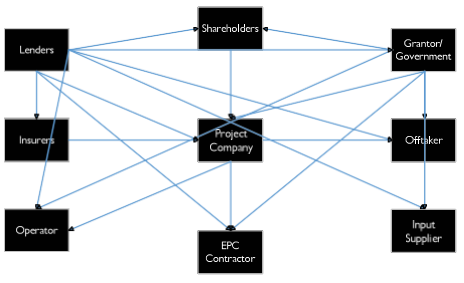
Counter-Party Performance

Project finance transactions, as discussed above, are typically long term in nature with some spanning several years to implement. It is therefore important that, as the project is being developed, the promoters bring on-board sound counterparties, with verifiable track records in executing similar projects. Meticulous due diligence is required before transaction advisors such as financial, legal and technical advisors are engaged. The temptation in project development is to engage counter-parties such as Engineering Procurement and Construction ("EPC") and Operation and Maintenance ("O&M") contractors based on lowest price tendered. This would be ideal to manage the project cost or increase return on a project, however limited experience in developing significant infrastructure projects may often result in replacement of a counter party mid-way into the project usually with delays in project completion.

In worst case scenarios, negligence in selecting the best contractor often results in substandard workmanship and failure to secure stage completion certificates, hence impacting on its ability to generate cash flows. A case in point is the construction of the Wembley Stadium. Construction commenced in the year 2000 to replace the original structure that was built in 1923. The contract was awarded to one of the lowest cost bidders Multiplex of Australia. However, it was noted that the winning bid by Multiplex was too aggressive in estimating the actual costs of the project. The cost of the project rose 36% between the bid being accepted and the contract being signed. By the end of the construction period, the cost had escalated from £326 million to £757 million. Furthermore a sub-contractor to the project selected to construct the innovative steel Arch, an untested structure in previous stadium designs, was replaced midway through the project after failing to deliver on the design. As a result of poor performance of counter parties to the project, the project took five years longer than first estimated and costs were more than double the initial estimates.

Legal Framework

A typical project finance transaction will entail the establishment of various legal and contractual relationships between the various counter-parties in the project. The table below shows interconnections of legal and contractual relationships in a project finance transaction:



Despite the large number of contracts and agreements that need to be executed in a project finance transaction, it remains vital that each agreement/contract be carefully drafted and meticulously reviewed. These contracts establish the rights and obligations granted to difering counterparties. Some of these agreements will be valid for the duration of concession periods of up to twenty five years and hence the need to have them thoroughly reviewed by competent legal advisors. The contracts will also incorporate clauses that afect the construction and operation of the project as well as the mechanics of repaying obligations as they fall due. In the Plumtree – Harare – Mutare highway rehabilitation project, which was carried out by Group Five of South Africa, various interconnected and independent agreements had to be signed between various parties. An operating company, Infralink had to be established and shareholder agreements between the Government and Group Five were executed. Various other agreements were crafted and put in place, such as the tolling agreement (O&M) between Infralink and ZINARA, EPC contract between Group Five and ZINARA and financing agreements between Infralink and DBSA.

Skills, Knowledge & Competencies

Project financing is also typically referred to as a non-recourse or limited recourse financing. This basically means that, the project solely depends on the cash flows of the project to repay outstanding debts and meet investor return. Efectively, until the project is constructed and is operational, the project company will not be able to meet its obligations. The proper construction of the project will mean that it is delivered according to design and specifications, within budget and within set timeframes. One way to ensure that counter parties to the project bring the best skills to the project is by way of performance guarantees or performance bonds from reputable financial entities. A reputable financial institution willing to vouch for the performance of an institution participating in a large scale project gives some comfort that the financial institution has carried out enough assessment of the counter party. In most projects, apportionment of cost emanating from construction delays, cost overruns, and performance shortfalls is a sure way to ensure that entities not competent enough are dissuaded from participating in the project.

Estimation and Analysis Failures

The complexity of a project can be a function of many aspects that include the project environment, geology, project design, project location, technology etc. In some instances, the complexity of aspects of the projects only becomes obvious when the project commences or is mid-way requiring certain unanticipated cost coming into being. An understanding of project complexities before commitments to completion schedule and budget are thus of paramount importance. Unrealistic commitments and delivery schedules often put pressure on project implementers and in some instances bad publicity for the project which can be detrimental to the future revenue generation of the project. A case in point is the 1995 Denver International Airport project in the USA which was initially planned to automate the handling of baggage through the entire airport. The system proved to be far more complex than originally thought which resulted in the airport sitting idle for sixteen months after completion while engineers tried to resolve the baggage system problem. The delay added approximately USD560 million which was unbudgeted for and had to be secured from financiers. Eventually, a fraction of the originally envisaged baggage system was implemented and a manual tug and trolley system was utilised to handle outgoing baggage. In August 2005, the system was eventually scrapped due to operational cost and technical challenges.

Estimation and projection pitfalls are best illustrated in the case of the Channel Tunnel linking France and UK. Forecasts were deliberately optimistic in order to make the business case for the tunnel. The original forecast was that the trains would carry seventeen million passengers in 2003, after eight years in operation, but only managed to carry circa seven million. Construction costs were initially estimated at £6 billion but eventually topped £10 billion. In addition, interest rates which were initially estimated at 5%-7% at the time of borrowing increased to 11%-17%, by early 1990s. These changes put the project company in serious financial problems. Despite various financial rescue packages through calls of funds from shareholders and lenders, the project company has remained in debt and has continued to make loses after interest payments.

Environmental Concerns

Governments and Development Financial Institutions ("DFI") across the world have become very conscious of the environmental impact of large projects. Several investors, including green funds and DFIs are now paying particular attention to environmental aspects of a project. An Environmental Impact Assessment study ("EIA") has become a paramount requirement in the project development process. An EIA, should in essence, thoroughly interrogate the potential environmental risks and what the project company has done to mitigate identified risks. A poorly done EIA may expose the project operation to significant environmental risks which can compromise the sustainable operation of the project.

As an illustration of the impact of environment concerns on projects, The Three Gorges Dam (TGD) in China is considered the largest hydroelectric dam in the world and took 17 years to complete the project. The TGD will not be able to operate at full capacity without impacting serious environmental harm, and therefore it is not nearly as e cient. Forecasts are that that by 2020, the TGD will be reducing its hydropower energy generation by 14% to remedy some of the environmental issues at hand.

Raw Supply Bottlenecks

Safeguarding raw material supply for future use in the project is a fundamental component of large scale projects. Thermal power stations rely on coal or natural gas and hydro power plants may require access and rights to su cient water resources to generate power. It therefore becomes crucial that supply contracts for the constant and consistent supply of raw material is put in place. A common pitfall is to execute a project without a secure supply side of crucial raw materials resulting in the equipment lying idle for years or operating at sub economic levels.

A classic example is the Zimbabwe Bio-Diesel project that was setup to produce diesel from the Jatropha plant. Although the plant may have been state of the art, the Jatropha supply side was not secured. Resultantly, the plant has not been utilised meaningfully since construction. It is therefore important to execute a long term supply contract for raw materials for the project from the onset. In cases where access rights such as water access rights for hydro power plants are required, securing these rights for periods that exceed the debt tenors will be desirable.

Local Culture and Customs

Local culture and customs are also aspects that were largely ignored by project developers a decade ago. The negligent handling of sensitive issues such as cultural heritage and local customs can significantly delay or stall a project. In the United States of America, Energy Transfer Partners (ETP) begun construction of a 1,900km long oil pipeline at a cost of USD3.7 billion to transport some 470,000 barrels of crude oil a day across four states, from North Dakota to a terminal in Illinois, where it can be shipped to refineries. The project stalled for years due to opposition from Native American protesters who argued that the pipeline will damage sacred burial sites and contaminate water bodies. The pipeline, which was almost complete except for the one-mile stretch under Lake Oahe, was stalled in April 2013 due to legal challenges. The US Government, under President Obama's administration, announced that the project would not be allowed to proceed. The project only resumed after the coming in of a new administration under President Trump who signed a Presidential Memoranda supporting the Dakota pipelines.

Certainty of Revenue Stream

Post project completion and commissioning, the project equity investors and debt lenders expect a return on investment. Over the planning and construction period, micro and macro changes within a country or industry may have an impact on future revenue streams of the project. Changes in government and political landscape within a jurisdiction may see introduction or increase of levies, fees and taxes that may render the project unviable on completion date. It is therefore key to lenders and other investors that the envisaged revenue stream is certain and that revenue forecasts are accurate.

In large scale projects in which government has a stake or is a beneficiary to the project, legal clauses that safeguard future revenue streams of the project by restricting introduction of sub economic price changes are common in Concession Agreements. During the planning stage of the project, it is extremely vital that the financial advisors of a project develop a financial model that incorporates all the potential revenue aspects of the envisaged project. The model is usually audited by an expert entity for accuracy and objectivity of assumptions. Sensitivity analysis on pricing amongst other project components should therefore give a range of results which guide legal clauses on product pricing, cost escalations, and price adjustments during the life of the project.

It is also of paramount importance that the security of these revenue streams is assured based on forecasting and competent feasibility studies. For instance, in a typical power project, revenue streams is secured through a Power Purchase Agreement ("PPA") that would ideally span for the duration of the project debt funding tenors. The absence of secured revenue streams creates uncertainty in future repayment capacity of the project.

The Channel Tunnel, mentioned under the heading Estimation and Analysis Failures above further highlights the impact of inaccurate estimation of revenue accruing to a project. In forecasting revenue, it was assumed that the existing ferry operators, the main way to cross the English Channel before the tunnel existed will go out of business. Unfortunately the analysis did not anticipate that the ferries would react to the tunnel with improved pricing and service, leading to them retaining market share. In addition, the creation of budget airlines providing cheap air travel between UK and France was not foreseen. After eight year of operation, passengers initially estimated to have reached seventeen million turned out to be just around seven million. Resultantly the project missed profit targets since inception.

Conclusion

Project finance transactions, typically being large size, with gestation periods of more than two years in most instances, encompass many parties. The potential losses resulting from negligence and oversight in the planning, development, construction and operation of a project can therefore result in unforeseen cost escalations which often result in project failures.

In order to ensure a successful project implementation, selection of able counter parties is of paramount importance. This would ensure that counter parties with the necessary skills and competencies become part of the project.

Putting together the necessary agreements that safeguard the interest of all parties involved to avoid uncertainties in interpretation of obligations and rights of counter parties is paramount so that the project faces minimum delays due to court processes as parties try to safeguard their financial positions.

Expert advice from experienced financial, legal and technical advisors is also vital during the planning and construction phases of a large project. Environmental concerns and activism now make it a prerequisite that project financiers and governments demand a project EIA. Expertise in forecasting project revenue streams and future operational environment make a diference in the final decision to implement and invest into the project hence avoiding legal battles with other stakeholders in the project.

In the end, a successful project finance transaction is not only defined by financial closure in raising the required capital, but also by the ability of that project to sustainably operate and deliver the intended service or product within the given timeframe at a cost acceptable to stakeholders which depicts value for money.

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