# PROJECT FINANCE FOR BUSINESS DEVELOPMENT

JOHN E. TRIANTIS

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# Project Finance for Business Development

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#### **Preface**

The record of infrastructure project financings provides ample evidence of shortcomings in skills and competencies, adequate project development preparation, and failures in project management. The idiosyncrasies and complexities of large infrastructure projects and the large number of participants account for some of the project failures. However, a number of project failures have their origin in the fragmentation of approach to project finance. That is, sometimes project finance is treated as a financial engineering problem, other times as an interweaving of contracts arrangement and at different times is considered mostly a project management issue. Each of these approaches focuses on subsets of specific issues of the broader discipline of new business development which incorporates elements of strategic planning, portfolio management, and financial and business planning intended to achieve competitive advantage.

Having learned from strategic planning, new business development projects, and project financing experiences, we recognized the need to treat project financing from a broader perspective than prevailing common practices. Why? Because Business Development groups view project financing a responsibility of Project Finance Organizations (PFOs) and PFOs had little knowledge of and interaction with Strategic Planning or Business Development functions. Discussions with project participants and results of a benchmarking study confirmed our assessment. Hence, our focus on integrating the knowledge, processes, and skills and competencies from the two disciplines to deliver significantly improved project financing solutions and make progress towards competitive advantage.

Besides the fragmented approach to infrastructure project finance in the current paradigm and the nonstellar record of project success, other reasons for undertaking the task of writing this book are:

- Treating project finance as an extension of strategic planning and new business development
- Misspelling myths about project financing that it is a matter of legal and financial engineering alone
- Sharing project experiences and findings of benchmarking studies of project financing practices conducted across different types of project participants
- Enhancing understanding of project teams of what is needed to make project finance an instrument to getting competitive advantage

 Addressing the inadequate development of project financing skills and competencies in different project participant organizations

Some typical misconceptions and wrong impressions the author has encountered are exemplified in the following actual statements by various project financing participants:

- The main success factors and drivers in project finance are the Sales and Engineering groups
- We count on relationships with customers to bring in new projects; we don't need project financing
- Strategic planning has nothing to do with project financing; why complicate things?
- There is no recourse to the developer in project finance, only to insuring parties
- Private placements are cheaper than loans to an infrastructure project
- The World Bank will give us their decision to participate in the project in 2–3 days (*for an estimated \$2.3 billion project*)
- A sponsor does need a project finance organization; Accounting and Finance groups can handle project finance and if not, outsource the financing
- All infrastructure projects are financeable and if you can't bring financing to the project, we'll bring in investment bankers
- Project finance is nothing more than good contracts and low cost loans
- Technical superiority of proposals wins bids most of the time

The problematic segmentation of approach to project finance raised the question: Is there another, possibly better way of treating infrastructure project finance in a more holistic approach? Our research showed that there was nothing to guide a broader treatment of project financing. Yet, we believed that a practical, balanced, broader, and integrative perspective is needed which is more effective. Hence, our treatment of the subject is from a new business development approach which also incorporates the key elements of strategic and business planning with financial engineering, contractual agreement interweaving, and process and project management. However, this book does not claim to be a treatise on infrastructure project financing; it is an eclectic and holistic treatment of its important elements to make it more effective.

In addition to the fragmentation of the approach to project finance, raising funding becomes more complicated and difficult to manage when unharmonized participant interests enter the picture along with underdeveloped host country and credit impaired customer considerations. To simplify the presentation and make it easier to grasp the essence of project finance, the topic is treated from a sponsor or developer perspective doing projects in countries able to deliver on obligations to the project. On some occasions, when warranted, we deviate from this approach and incorporate other considerations and various participants' viewpoints.

Addressing infrastructure project finance from a new business development, strategic planning, portfolio management, and strategic forecasting elements approach combined with traditional project finance elements is a unique method. The reasons this approach is unique and of benefit to the readers is that it:

- Describes the skills and competencies, processes, analyses, and evaluations required to structure and finance effectively any type of project financing
- Applies knowledge of competitive analysis, forecasting, strategic and business planning, and business development to address project financing issues leading to competitive advantage
- Addresses organizational, project evaluation, process and project management, and funding sources and instrument issues while abstracting from nonessentials that take away attention from major success factors
- Pulls together key factors from each fragmented approach into an eclectic and integrated picture to discuss project finance while leaving the discussion of highly specialized and detailed parts to traditional treatments of the subject
- Helps identify reasons for project failures, key project success factors, and whether a competitive advantage to sponsors is obtainable through highly skilled, high performing PFOs
- Presents a well-considered, balanced, and cost benefit/analysis-based approach to project development, risk assessment and allocation, and project structuring and financing

The expectation is that readers will appreciate how the new business development approach is applied in any project to screen and evaluate opportunities and develop projects more effectively. That is, to bring projects from the prefeasibility study to financing closing quicker, address project stakeholder issues and harmonize interests, deliver winning financing proposals, and create profitable projects for all stakeholders. These are key elements in striving for and maintaining competitive advantage.

#### **Acknowledgments**

The idea of formalizing a comprehensive presentation of project finance for new business development has its origins with experiences in projects I did as a business consulting economist. The quest for sound processes, critical analyses, objective evaluations, innovations and continuous productivity improvements have been an integral part of my professional life. I have learned a lot from projects and interactions with financing advisors and colleagues, but it is difficult to ascertain what I have learned from whom or what specific project experiences I benefited from the most.

I took my first steps in project finance under the support and guidance of a most intelligent and capable CFO, Mary Baughman, who placed her trust on my ability to create and manage a professional project finance organization for AT&T Submarine Systems. I owe her gratitude for that which got me into the field of project finance. My skills have been augmented by discussions and work with financing advisors and consultants, financiers, and relationships with official and private funding source managers who shared freely valuable knowledge. I also learned from experiences of other project finance organizations and benefited from interviews of different types of project finance participants and insights from an extensive benchmarking study.

In preparing this book I have had the privilege of benefitting from constructive reviews and seasoned experience inputs and knowledge of Jeffrey Morrison, John Costas, Robert Rieffel, and Julie Hill. I am thankful for their useful comments and suggestions on an earlier draft of the manuscript. The help and guidance of the SAS and Wiley editorial staff are also acknowledged, but all errors and omissions are my own responsibility.

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#### **About the Author**

John E. Triantis is a retired business consulting economist, business strategist, and former project financing director with a track record of introducing effective processes and practices to develop value creating projects. He is an experienced new business development project leader and a trusted advisor in large investment, international infrastructure financing, and organizational restructuring projects. His passion is to help clients minimize decision uncertainty and project risk by integrating sound processes, analytics, and evaluations with strategic planning and business development principles to maximize project value. He uses unique methods and techniques to create world-class organizations, apply best practices to successful project development and financing, and create sound project value realization measures.

His broad experience encompasses effective analysis for strategic decisions, investment evaluations, project risk management and financing, and productivity enhancements. He has developed practical methods, assessment tools, and early warning systems and uses cost-benefit approaches to minimize time to decision, address risk mitigation effectively, and maximize chances of project success. He delivers knowledge and hands-on coaching to clients on strategic planning and new business development, investment opportunity assessments, project financing, business cases, and business planning. His quest for efficient decision making has produced a proprietary system of quantifying project success at the idea stage before major investment decisions are made.

To address needs and fill gaps in client understanding, he authored numerous position papers and published the books *Creating Successful Acquisition and Joint Venture Projects: A Process and Team Approach* and *Navigating Strategic Decisions: The Power of Sound Analysis and Forecasting* as well as articles in professional domestic and international journals and books. He is the author of this book and currently working on a manuscript for the book *Assessing Project Success at the Idea Stage*. John holds a PhD in macroeconomics and international economics and a master's degree in statistics and econometrics from the University of New Hampshire. His bachelor's degree is in economics and mathematics from Fairleigh Dickinson University. He also served in the U.S. Army during the Vietnam conflict.

# Project Finance for Business Development

# CHAPTER 1

### Introduction

Why Project Finance for Business Development?

he treatment of project finance has primarily been for the infrastructure industry, but the processes and techniques used are also applicable to other off-balance-sheet financings of separate entities, joint ventures, and projects in other industries. Project finance has traditionally been treated from a financial engineering or from a contract finance perspective with applications in infrastructure projects in underdeveloped or developing countries lacking sufficient public and private resources to fund needed projects. Projects of such characteristics are the most challenging and once experience is obtained from such projects, it is easily transferable to projects in other industries and developed countries.

The globalization of business has intensified competition among project sponsors/developers, construction contractors, technology and equipment providers, and some funding sources. The result is coopetition in project development and financing that has increased the need for effective project finance solutions and better-structured partnerships and joint ventures. In this environment, to win large project bids, sponsors need an overall competitive advantage. To create profitable investment projects, they need a disciplined, new business development approach to project finance.

Project finance is not a stand-alone function based on contract finance or legal engineering as it is being treated in the current paradigm. It has been developed to advanced levels for the primary purpose of facilitating new project and business development activities with the nonrecourse aspect as an ancillary factor. It should be treated as part of new business development with its focus on striving to maintain or obtain competitive advantage. Hence, our approach to project finance is different than the one in the current literature and its novelty lies with the value created through addressing it from a broad, new business-development perspective. Why? Because project finance is part of new business development and has to be viewed in that context and not as a stand-alone discipline, and because its key objective is to get competitive advantage through new investments. Other reasons for and benefits of using this approach are explained later in the chapter.

Infrastructure projects are large investments by the public and/or private sectors that require major financial and human resource commitments to build physical assets and facilities needed for economic development and social functioning of a country. Infrastructure projects include power plants, pipelines, railroads, roads and bridges; ports, terminals, and airports; telecommunication networks, and water and sewage treatment plants. They also include social and healthcare facilities such as public housing, elder care facilities, prisons, hospitals, schools, and sports stadiums.

Due to their large and special financing requirements and challenges, infrastructure projects are usually placed in four categories:

- 1. Greenfield projects, where new facilities are built requiring larger capital investments than investments in existing project companies in operation
- 2. Brownfield projects, where investment is made to upgrade and refurbish existing facilities and equipment in order to increase productivity or extend their economic life
- 3. Stock or extraction projects, where natural resources are extracted and sold until depletion, such as coal and mineral mining, and gas and oil extraction
- 4. Flow-type projects, where the project assets are used to generate income by selling their output or the use of their services. They include pipelines, toll roads and bridges, ports and airports, and so on

There are several definitions of project finance for different types of projects, all valid but each stressing some more than other parts of the discipline. However, we prefer the broader definition shown in the box. To understand what project finance is all about, the definition needs to be expanded to include the structuring of the project company, known as a special purpose company (SPC) or a special vehicle company (SPV); the characteristics of projects, what project finance involves, and the risks associated with a project. That is, it includes:

Project finance is the art and skill of piecing together new business development elements, financial engineering techniques, and a web of contractual agreements to develop competitive projects and make the right decisions to raise funding for industrial or infrastructure projects on a limited/nonrecourse basis where lenders look to the cash flow for loan repayment and the project assets for collateral.

- 1. Structure of the company: Common SPC structures are corporations, joint ventures, partnerships, limited partnerships, and limited liability companies
- 2. Properties of projects: Infrastructure projects require large capital expenditure, entail massive negotiations and contracts, and require long operating periods
- 3. What project finance involves: It requires the creation of a legally separate, single purpose entity that is a shell company to build the project assets and capture revenues. Financing is of a limited/nonrecourse basis and

it is based on cash flows and the assets owned by the SPC that is responsible for loan repayment

- 4. *Risks associated with a project:* Financing is provided to the SPC and not to the sponsors and this gives rise to risks usually mitigated through contracts, insurance, and credit enhancements. A common set of risks in project finance includes primarily political, demand, price, supply, currency, interest rate, and inflation risks
- 5. Project development complexities: Addressing them entails the undertakings of project screening and the feasibility study, project development, financial model development, and economic evaluation. It also requires project risk management, due diligence, a financing plan, financial structuring, creation of a project company business plan, and project implementation

A key objective of project finance is to minimize or avoid uncertainty. Unlike asset-based finance, where the asset value determines financing, the adequacy of project cash flow is the foundation of funding. Since infrastructure projects have different types of assets and objectives, capital requirements, and risks; they get different benefits from project financing. However, infrastructure projects have a number of common characteristic due to the common project financing technique. Gatti (2012) names the common elements of project financings as: long economic life assets with low technological risk, provision of essential public services with inelastic demands, regulated monopolies or quasimonopolies with high barriers to entry, and stable and predictable operating cash flow.

The components of project finance are outlined in Section 1.6 and discussed in subsequent chapters, but the basic and common components across projects are the presence of a host government ceding agency, sponsor or developer equity, commercial bank loans, and institutional debt and equity investors. Usually, there is some subordinated debt from sponsors and other project participants, collateral security and revenue assignment, and enhancements provided by sponsors and unilateral and multilateral institutions. Also, there is a common set of project finance prerequisites such as a stable political and regulatory environment, reasonably adequate industry structure, sound project development and planning, thorough risk assessment and mitigation to allocate risks effectively, and contractual agreements to ensure project viability.

The historical origins of project finance and its evolution are traced in Section 1.1 and its advantages and disadvantages are briefly discussed in Section 1.2. The differences between project finance and corporate and structured finance are explained in Section 1.3. To get a sense of the importance of project finance, its size, and the industries it impacts, some of its characteristics are shown in Section 1.4.

Because project finance is part of business development, Section 1.5 provides the rationale for using a new business development approach to evaluate, structure, and fund project finance transactions aiming to create a competitive advantage for the company. The structure of the book and chapter contents is presented in Section 1.6 and how to maximize its benefits to the reader is explained in Section 1.7.

#### ORIGINS OF PROJECT FINANCE 1.1

The basic idea of project finance is not new, but it has evolved and refined through time and has now become a highly skilled discipline and an art. According to Miller (1991), elements of project finance present in Mesopotamian societies were expanded by ancient Greeks to foster maritime trade and to finance wars. Maritime loans were given to ship owners and merchants to buy goods for sale abroad with the understanding that if the ship returned, the loan would be repaid in full plus a return (often as high as 25% because of risks involved) out of the proceeds of goods sold abroad and out of the proceeds from the sale of cargo brought back. If the ship was lost at sea or did not return with cargo from abroad, in the first instance the loan was not repaid and in the second case was partially paid through proceeds of sales of cargo sold abroad.

The Athenians used project finance concepts to finance war in the following manner: They created an alliance of city-states to fight the Persians using the Persian model that required members to pay an annual tribute. This enabled the Athenians to turn the alliance into an empire and their allies to get a share of the benefits. The Spartans used a different war financing method: They borrowed from a Persian king to fund building a fleet to fight the Athenians "in exchange for the right to levy tribute again on Ionia's Greeks" (Pritchard, 2015). The Romans enhanced the Athenian merchant model with legal agreements and created the fenus nauticus (sea loan), in which merchants would get to share the risk with the lender.

A more recent project finance experience is that of the British Crown financing of the Devon Silver mines in 1299, which repaid a Florentine merchant banker with rights to output from the mines in a one-year concession (Kensinger and Martin, 1988). Beginning with the Age of Discovery, the English, French, Dutch, Spanish, and Portuguese lenders financed water irrigation, canal, road, and railroad construction projects in colonies primarily in India, Africa, South America, and the Middle East. The lenders were repaid from revenue proceeds from those projects or from taxation revenues. An example of such projects is the Suez Canal project in late nineteenth century by the French and the railroad network build by the British in India.

In the late nineteenth century, numerous oil and gas exploration and production ventures in the United States were financed with bank loans that were repaid from proceeds of sales of outputs from those projects. Also, in the early twentieth century, the US government financed the construction of the Panama Canal under a project funds transfer syndicated loan arrangement of eight banks led by J.P. Morgan. However, the North Sea project in the late 1970s resembled properties of modern project financing whereby British Petroleum raised a billion British pounds for that project's construction through a forward purchase agreement.

#### 1.2 PROJECT FINANCE ADVANTAGES AND DISADVANTAGES

The reasons for using project finance are the several advantages it yields to different project stakeholders. The benefits of project finance vary by project type and participant and include the following:

- 1. Raises funding at a reasonable cost for projects not financeable by other methods
- 2. Minimizes equity contributions and thereby increases borrowing capacity for sponsors or developers through the project company
- 3. Avoids the risk-contamination issue by diversifying political risk and mitigating other risks through allocation to parties best able to absorb and through insurance contracts
- 4. Higher leverage than on-balance sheet finance translates into higher sponsor or developer return on investment
- 5. Well suited to finance large, capital-intensive projects that have long construction periods and no revenue until start of operations
- 6. Project-financed deals have the benefit and support of high-quality counterparts, such as export credit agencies (ECAs), multilateral institutions, and global insurers
- 7. Lenders to projects and credit support parties provide incentives for and require careful project evaluation, risk assessment, and due diligence
- 8. Better managed and improved project company operations because of stringent lender requirements and controls of its cash flow
- 9. Provides incentives to lenders to cooperate in the project company's restructuring and reorganization and be less likely to foreclose
- 10. Increases public infrastructure investment than otherwise would be the case and enables governments to get value for their money; that is, greater project value and efficiency
- 11. Increases tax revenues for the host government and provides tax benefits to sponsors or developers