PROJECT FINANCE COURSE OUTLINE

Term: Spring 2009 (1st half-semester) Instructor: Adjunct Prof. Donald B. Reid Time: Office: KMEC 9-95, 212-759-5655 Classroom: Email: dreid@stern.nyu.edu Admin aide: Contact: dreid@stern.nyu.edu

Background

Project finance is used on a global basis to finance over \$300 billion of capitalintensive projects annually in industries such as power, transportation, energy, chemicals, and mining. This increasingly critical, financial technique relies on nonrecourse, risk-mitigated cash flows of a specific project, not the balance sheet or corporate guarantee of a sponsor, to support the funding, using a broad-based set of inter-disciplinary skills

Not all projects can support project financing. Project finance is a specialized financial tool necessitating an in-depth understanding of markets, technology, sponsors, offtakers, contracts, operators, and financial structuring. It is important to understand the key elements that support a project financing and how an investor or lender can get comfortable with making a loan or investment. Several industries will be used to demonstrate project-financing principles, with emphasis on one of the most important, power.

Objective of the Course

The purpose of the course is to understand what project finance is, its necessary elements, why it is used, how it is used, its advantages and its disadvantages. At the end of the course, students should be able to identify projects that meet the essential criteria for a project financing and know how to create the structure for a basic project financing.

The course will study the necessary elements critical to project financing to include product markets, technology, sponsors, operators, offtakers, environment, consultants, taxes and financial sources. We will discuss and apply the fundamental risk allocation principle of assigning risks and tasks to the party most capable of handling them. Various sources of financing will be discussed including commercial banks, equity sources, the bond markets and leasing.

Financial modeling will be used as an important tool in understanding the economics, risks and sensitivities of a project. Several guest speakers from the real world will be invited to discuss topics such as current market conditions, contracts, hedging, the role of consultants and other pertinent issues.

Preparation and Conduct of the Classes

The student's primary obligation in this course is to prepare for class discussion based on a thorough reading and analysis of assigned materials and preparation of cases in a team setting.

Students will be assigned to 3-person teams to work together on 3-4 cases in this six-session course. The teams will be diverse, reflecting the nature of our global business environment. Each team will have at least one "modeling ace." The fundamental belief in doing cases is that one learns best by doing versus reading and memorization.

Class participation and discussions are important learning tools. Class participation will be graded.

Individual students may make presentations with the approval of the instructor on real world topics of interest such as an actual project financing. Such presentations will receive extra credit and need to be discussed with the instructor.

Class topics to be covered will include:

Project Structure and Participants: Debt, equity, developers, consultants, offtakers, sponsors, operators, law firms, consultants, construction and engineering firms, political and regulatory bodies

Project Risks and Mitigants: Markets, currency, construction, technology, offtakers, input supplies, operations, sponsors, political, environmental and regulatory

Sources of Financing: Banks, insurance companies/pension funds, public markets, equity funds, leasing, sponsors, financial equity, strategic equity

Credit Agreements: pricing, terms, conditions, covenants, representations and warranties, events of default.

Financial Modeling: The role and importance of project modeling to identify, test and measure risks (this will be done through class discussion, study examples and use in the cases).

Quizzes: There will be 2-3 quizzes taken as Blackboard Assignments.

Grading: The weights for the student's overall grade are:

Class participation	10%
3 Homework Quizzes	10% each
Cases	60%

Textbook: One or two books are required, and will be available in the bookstore. All other readings and all cases will be distributed in a course-pack at the start of the course or during the classes.

COURSE OUTLINE SESSION #1

Introduction – Project Finance Overview and Fundamentals Read: TBD Topics Covered

- 1. What is "project finance?"
- 2. How widely is it used
- 3. Parties to a Project Financing
- 4. What are the advantages and disadvantages of Project Finance
- 5. What are the necessary perquisites to a Project Financing
- 6. Project Financing Risks and Structuring Part I
- 7. What is role of the financial modeling and projections
- 8. Readings and Case Assignment

SESSION #2: Project Finance Structure and Participants Read: TBD Topics Covered

- 1. Case Discussion and Presentations
- 2. Project Financing Risks and Structuring Part II
- 3. Guest Speaker / Special Topic
- 4. Readings and Case Assignment

SESSION #3: Project Finance Risks and Mitigants Read: TBD Topics Covered

- 1. Case Discussion and Presentations
- 2. Project Financing Risks and Structuring Part III
- 3. Guest Speaker / Special Topic
- 4. Readings and Case Assignment

SESSION #4: Sources of Capital Read: TBD Topics Covered

- 1. Case Discussion and Presentations
- 2. Project Financing Risks and Structuring Part IV
- 3. Various sources of debt and equity
- 4. Guest Speaker / Special Topic
- 5. Readings and Case Assignment

SESSION #5: The Loan Agreement (possible guest speaker) Read: TBD Study questions: Topics Covered

- 1. Case Discussion and Presentations
- 2. Project Financing Risks and Structuring Part V
- 3. Guest Speaker / Special Topic
- 4. Readings and Case Assignment

SESSION #6: Final Case and Wrap-up Read: TBD

- 1. Final Case Discussion and Presentations
- 2. Guest Speaker / Special Topic
- 3. Wrap-up

Case Format

A. State your recommendation: To lend, Yes or No

B. Conduct Analysis

- 1. Summarize the transaction and parties involved. If appropriate, draw a box diagram showing the relationships and direction of cash flows
- 2. Identify and evaluate the key participants
- 3. Evaluate any environmental, regulatory and political issues
- 4. Identify and evaluate the key strengths of the project
- 5. Identify and evaluate the key weaknesses, risks and mitigants of the project
- 6. Develop a financial model. Run scenarios. Test the key economic drivers
- 7. Describe any other relevant issues or matters pertinent to the credit/investment decision

C. Summarize and explain the reasons for your recommendation

D. Exhibits