Emerging market long term finance today is based on project finance structures which mitigate the extreme risk of operating in unstable and highly volatile environments. Multimillion dollar projects are organized in remote and inaccessible areas of the world involving complex industrial processes. The resulting bonds and notes are then sold to investors worldwide. These new structures organized to manage intricate risks in the financing of infrastructure in emerging markets are called project finance. It differs in an important way from corporate finance and the financial analysis of balance sheets in that past performance is typically non-existent and thus not a critical indicator of the outcome of a project.

CLASS STRUCTURE AND GRADING REQUIREMENTS

Lectures: The objective of the course is twofold. First, to analyze the mechanics of project finance in emerging markets and second, to evaluate and discuss the many different types of risks involved in the discipline. The course will analyze actual project finance cases from different economic sectors and areas of the world. The lectures will focus on the structure and analysis of emerging markets and project finance.

The readings are a key component of this course and are built around a project finance text, journal articles (Infrastructure Finance or "IF"), World Bank (Public Policy for the Private Sector) and IFC discussion papers and articles. The key text is:


Additional texts are:


Case writeup and discussion: During the semester, approximately 10 cases will be prepared by the students and graded by the instructor. These are drawn from HBS, offering memorandums, prospectuses and other sources. The class will feature guest lecturers drawn from the project finance community who will make key presentations during the semester.

Grades: The grade will be determined by written case resolutions (70%) and by class presentations and discussion (30%). The organization of study groups is encouraged for the preparation of the weekly case assignments and some of the more demanding readings.

SCHEDULE AND ASSIGNMENT OF READINGS AND CASES

Session 1: Introduction to Emerging Markets

READINGS


Roger D. Feldman, Brazil: Deregulation and the Future of Project Finance@ The Journal of Project Finance, Spring 1998

CASE


Session 2: Organization of Project Finance

READINGS

Chapters 1 and 2

Clifford Chance, Project Finance, New York, IFR, 1991
Chapters 1 and 2

CASE

The Hostile Bid for Red October

Session 3: The structure of a project: identification, engineering, procurement, construction, operation and management

READINGS

Finnerty, Chapters 3 and 5

Clifford Chance, Project Finance, New York, IFR, 1991
Chapter 3

John Veech, A Case Study: Financing the Dayabumi Salak Pratama Project @ The Journal of Project Finance, Spring 1997

Infrastructure Journal, An Indian Take-Away: Lessons learned in project development @ November 1997

CASE

Muszertechnika Rt.: Hungarian Telecommunications

Session 4: Main Sources of Finance for Projects

READINGS

Finnerty, Chapters 7 and 8

Infrastructure Finance (IF), "Mission Impossible, Export Credit Agencies", April 1996

Deepak Gopinath, A Power Plays @ Institutional Investor, May 1998

CASE

Petrolera Zuata, Petrozuata C.A.

Session 5: Sources of Financing for Utilities, Telecommunications, Roads and Infrastructure

READINGS

Finnerty, Chapters 6 and 9
Institutional Investor, Pumping up the volume @ January 1998

The World Bank Group, Public Policy for the Private Sector, "Infrastructure Investment Funds", Andrea Anayiotos, December 1994, Page 29


The World Bank Group, Public Policy for the Private Sector, A retrospective on the Mexican Toll Road Program @ Jeff Ruster, September 1997

CASE

Empresas ICA and the Mexican Road Privatization Program
(Please read Finnerty, Chapter 12)

Session 6: Structuring the project and role of participants
Financial structure and sectors: some general guidelines
The sponsor's role
Government agencies and regulatory framework

READINGS


CASE

Enron Development Corporation: The Dabhol Power Project in Maharashtra, India (A)

Session 7: Contracts, covenants and security in project finance
Role of contracts/covenants: discussions with and role of banks, other lenders, government, multilaterals, arrangers
Completion guarantee checklist
Repayment schedule, debt service and leverage ratio
Legal opinion and role of the law firm
Default definitions and "force majeure"

READINGS

Finnerty, Chapter 4

Clifford Chance, Project Finance, New York, IFR, 1991
Chapter 6


Shou Qing et al. @Risk Management Framework for BOT Power Projects in China@ The Journal of Project Finance, Winter 1999

Curtis Spillers, A Playing the Risk Game@ Project Finance 1999

CASE

The An Tai Bao Coal Mining Project, China

Session 8: Identification of risks: country, political, regulatory framework, sectorial and commercial

READINGS

Finnerty, Chapter 10

Clifford Chance, Project Finance, New York, IFR, 1991
Chapter 4

The World Bank, Project Finance at The World Bank, 1996 (On Reserve)

Antonio Vives, A Private Infrastructure: Ten Commandments for Sustainability@ The Journal of Project Finance, Spring 1997


CASE

The An Tai Bao Coal Mining Project, China
Session 9: Rating the Project

READINGS


Standard and Poor, Credit Ratings for Project Finance Transactions@ March 1997
Standard and Poor, Emerging Markets Infrastructure: Refinancing Risk@ Winter 1999

Laura Kuffler and Raymond Leung, Rating Criteria for Global Project and Infrastructure Developers@ The Journal of Project Finance, Spring 1998

CASE:

Petrozuata Rating


READINGS


Jefferson Seabright, Perspectives on Infrastructure@ Infrastructure Journal Spring 1999

Global Power Report, IPPs in Indonesia put in tough spot as utility is unable to honor PPA@ December 11, 1998

CASE: Evaluate the PT Paiton Deal.

Session 11: Presentation and submission of the proposal, term sheet or engagement letter. Market discussion. Term sheet and layout
Amortization schedule of bond and notes.
READINGS

Chapters 5 and 7

Engagement Letter for the Guacolda Power Project

CASE:
The Asian Infrastructure Development Company

**Session 12: Distribution of prospectus. Roadshow. Placement of the notes and bonds.**

READINGS

Finnerty, Chapter 15

Chapter 8


CASE

**Class Presentations during the Semester**

Chris McCall, Citibank, Global Project Finance

Wendy Hannibal, Dresdner Kleinwort Benson