Project Finance
PROJ_MGT 475

Course Objective:
The objective of this course is to explore the structure and methods of financing infrastructure projects. Project finance refers to the financing of major capital investments in which the sponsoring company or authority has segregated the security for the project assets from its general purpose obligations. It is employed primarily in the financing of major infrastructure facilities, such as tollways, power plants, water supply systems, and public transportation. Due to the many risks inherent in employing project finance, the crucial element required to enable the project to go forward is often the proper allocation of risk. Using case analysis, this course will focus on methods for the valuation of projects employing project financing and approaches to the allocation of risks among the many participants in such projects.

Week-by-week description of the course:

Week 1  Nature of Project Financing for Infrastructure Projects, Participants, and Financial Structure
- Definition of project finance
- Main feature of non-recourse debt in project financing vs conventional financing
- Main uses of project financing in infrastructure development
- Benefits of employing project finance
- Structure of a project financed project
- Case study -- Sidney Cross-City Tunnel (Part 1)

Week 2  Risks Associated With Project Financing
- Types of project risks: Construction, demand, inflation, interest, exchange, regulatory, political, and counterparty
- Methods of risk allocation: Performance contracts, insurance, futures, swaps, and options
- Case study -- Sidney Cross-City Tunnel (Part 2)
Week 3  Corporate Structure and Legal Instruments Employed in Project Financing
• Corporate structure employing special purpose vehicles (i.e. corporations)
• Types of contractual arrangements used in project financing:
  Construction performance, take-or-pay contracts, O and M agreements, and long run supply arrangements
• Refinancing mechanisms of project finance
• Case study -- Hong Kong Western Harbor Crossing (Part 1)

Week 4  Valuation of Proposed Project Financing Projects
• Analysis of operational cash flows
• Defining an optimal capital structure
• Requirements for cover ratios
• Case study -- Hong Kong Western Harbor Crossing (Part 2)

Week 5  Methods of Assessing the Sensitivity of Valuation Estimates
• Effects of adjustments on debt structure
• Use of scenario and Monte Carlo techniques to evaluate the variance of project performance estimates
• Case study -- Nashville waste-to-energy project.

Grade Determination:
Final Exam .....................................34%
Group Presentation .......................33%
Case Analysis .................................33%

Text:

Software:
None

NOTE: This course description explains the essence of the material covered. Canvas is the best source for the most up-to-date information about specific details for any given offering of the course.