Amsterdam Institute of Finance

Project Modeling in Excel

Edward Bodmer

Objectives

Project Modeling in Excel provides participants with the ability to create and understand project finance models. Through building models in a hands-on environment, you will be better able to quantify risks of different types of projects; to appreciate costs and benefits of different project finance features such as covenants, reserves, sweeps and other factors; and to create efficient analyses.

Key benefits

- Understand the objectives and the structure of project finance models compared to other types of financial models
- Work through the four difficult problems in project finance modeling including
  - Complex cash flow waterfalls
  - Sizing of debt with capitalized interest and alternative drawdown schedules
  - Flexible debt sculpting
  - Debt service reverses that look ahead to future accounts
- Quantify project risks using different techniques and understand mistakes in risk assessment
- Incorporate structural enhancements into models and gain insight into the costs and benefits of the alternative features
- Learn Excel techniques to make better presentations from models and to make models more transparent and efficient

Who should attend?

Project Modeling in Excel targets financial professionals involved in evaluating the economics of energy, infrastructure, real estate and other projects. Bankers, developers, financial advisors, consultants, investors, managers and others interested in creating models or simply understanding how to interpret models created by others can benefit.

For those less experienced in Excel, a complimentary optional pre-course is available on the evening prior to the program.

Dates & Fees

October 9 – 11, 2012

€ 3,300

CFA Institute
CE Qualified Activity
CFA 18 CE credit hours

Faculty

Edward Bodmer provides financial and economic consulting services to a variety of clients, he teaches professional development courses in an assortment of modeling topics (project finance, M&A, and energy) and delivers courses for the University of Texas.

"Very hands-on and practical use/demonstration of modeling techniques."

Manager,
Deloitte Enterprise Risk Services
Belgium

Program Content

Day 1 - Module I
Introduction and Model Structure
The program begins with introductory comments about the skills and general objectives in project finance modeling with an emphasis on the difficulty in measuring and valuing risk.

Exercises
- Basic Mechanics of Project Finance Models

Day 1 - Module II
Continuation of Model Structuring Issues
The second module of the program addresses details of project finance models including interest during construction, liquidated damages, debt service reserve movements .

Exercises
- Monthly Construction and Delay
- Setting-up Flexible Inputs
- Model Verification
- Analysis of Sources and Uses

Day 2 - Module III
Debt Structure and Cash Flow Waterfall Exercises
As project finance is a type of debt, the third module addresses various theoretical and practical issues related to debt financing in general and project debt in particular.

Exercises
- Debt Schedule and Debt Capacity
- Debt Structuring

Day 2 - Module IV
Risk Analysis from Alternative Perspectives
Module four addresses economic analysis behind key value drivers in a project finance model.

Risk Analysis Exercises
- Set-up of master scenario page
- Break-even analysis
- Sensitivity analysis and graphs
- Scenario analysis
- Tornado analysis

Day 3 - Module V
Structuring and Building a Project Finance Model
The fifth module begins a case study in which participants develop the structure of a project finance model through laying out the structure of the model and writing efficient formulas for the case.

- Debt Service Reserves
- Efficient Cash Flow Waterfall Modeling
- Re-financing
- Circularity Macros

Day 3 - Module VI
Analysis using Model Created in Case Study
In the final part of the program participants use the model they have created to analyze a series of decisions and evaluate various risks.

Case Study Exercises
- Construct a sensitivity analysis
- Construct scenario and tornado diagrams
- Develop time series equations
- Build a Monte Carlo simulation

*Visit **www.aif.nl** for further details of the program content.*