

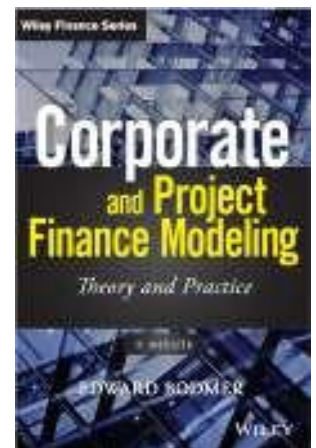
INTERMEDIATE CORPORATE AND PROJECT FINANCE MODELING FROM A-Z

- Highly Interactive Hands-on Course with Strict Limit on Participants
- All Modules are Live Stream (No Videos)
- You Work on Models During Five Sessions and Course Customised According to Your Pre-Course Question Responses
- Learn How to Be a Creative and Innovative Modeller without the Typical Blah Blah Blah

Faculty: Edward Bodmer



Separate Sessions to Avoid Torture



Course Overview

- The corporate and project financial modelling digital course is an intensive and interactive hands-on course that offers attendees a comprehensive set of technical and financial skills to master financial modelling. The course is highly structured with separate on-line sessions that each last for approximately four hours. The sessions will be broken into two-hour segments with continuing dialogue and questions.
- The first session of the course addresses with excel techniques that are applicable in developing financial models and financial databases (this is in no way a typical excel course; the focus is on what you really need to create a financial model). The on-line sessions begin with a survey of a variety of financial models including corporate models for valuation and credit and project finance models.
- The second and third sessions address corporate finance modelling. These two sessions cover integrating historic analysis in a flexible manner and efficiently structuring a corporate model using a case study. You will learn corporate finance ideas of value creation while working through the model equations.
- The second part of the corporate modelling session addresses alternative valuation approaches including traditional growth rate approaches and alternative models that develop normalised cash flow and use a value driver formula.
- The fourth and fifth sessions turn from corporate modelling to project finance modelling. In these sessions you will understand the contrast between corporate finance and project finance and learn project finance structuring through creating a model. The first session on project finance will address timing, structuring, operational and cash flow aspects of project finance models. The second and final session will cover debt structuring issues in project finance including debt sculpting, cash sweeps and reserve accounts.
- Financial modelling concepts are taught with interactive on-line sessions using a combination of focused computer exercises, example models (including what not to do) and various guidelines. Participants in the seminar build complete financial models from A to Z and use the model in valuation and credit analysis. By the end of the course, participants will be able to understand and construct a variety of models using similar principles.



**No Muting and
Interruption
Encouraged**

Session 1 - Excel Functions and Techniques for Financial Modelling

Introduction

- Overview of Course
- Review of Selected Actual Models
- Understanding of Resources Provided

- Becoming more Efficient in Financial Models
- Key short-cuts and combinations that are useful
- Creating your own short-cuts with a simple macro
- Using tools to format and set-up spreadsheets
- Importance of TRUE/FALSE switches in modelling analysis

Financial Functions in Excel

- What Not to do in Excel
- Fancy functions to show off
- Vlookup and Hlookup problems
- Using Match and Index when Lookup will work

Three most important functions in financial modelling – Index, Sumif and Lookup

- Scenario example
- Graphing example

- Time Series example
- Matching date example
- Month to Year example
- Flexible averaging example
- Use of date functions to convert monthly and semi-annual flows to annual data
- Use of excel functions to transpose data, present frequency distributions and perform statistical analysis
- Text and error checking functions

Tools for Analysis and Sensitivity Analysis and Presentation

- - Effective use of range names
- - Development of scenarios using INDEX and CHOOSE functions
- Development of scenario analysis using combo boxes and spinners
- Applying developer tools in an efficient manner

Case Study: Create scenarios and make graphics for presentation using advanced excel functions with monthly, quarterly and annual cash flows

Session 2: Corporate Models – Operating Analysis and Incorporation of Historic Data

Alternative Model Structures

- Corporate models and history
- Project finance models and different time stages
- Acquisition models and transaction definition
- Merger and acquisition models

Overview of Financial Forecasting Models

- Model Objectives
- Review of Actual Models
- Mistakes in Modelling (ignoring financial ratios, capital expenditure consistency, impossible growth rates, business cycles)
- Model Layout (inputs, working analysis, debt structure, financial statements)
- Model Complexities (depreciation, taxes, circularity, minority interest, deferred taxes)

Work Through Model Design and Structure with Case Study

- Philosophy of Well-Designed Models and FAST
- Model Organisation (sheet order, repeating inputs, sheet colours, sheet columns)
- Spreadsheet Conventions (positive number, switches, corkscrews, switches)
- Simple formulas (formula length, max and min statements, range names)
- Model Documentation (macro names, column titles, units)
- Auditing and Error Checking

Construction of Corporate Model

- Acquiring Data for Reading Financial Statements
- Time Switches for History and Forecast
- Construction of Working Analysis, Debt Structure and Financial Statements

Session 3: Project Finance Models – Theory, Timing and Operating Cash Flow

Theory of Project Finance Versus Corporate Finance

- Timing and Terminal Value
- Risk Changes over Phases
- Debt as Validation of Project Concept
- Contracts in Project Finance
- Use of IRR and DSCR in Project Finance

Timing and Assumptions in Project Finance

- Review of Input Structure
- Reason for Monthly Construction and Semi-Annual Operation
- Incorporation of Sensitivity Variables
- Development of Flexible Timing Assumptions
- Computation of Timing Flags
- Use of Project Dates

Operating Analysis in Project Finance Models

- Computation of Capacity and Output from Flags

- Monthly Variation in Output for Semi-Annual Model
- Capital Expenditures and S-Curves
- Operating Expense Analysis and Macro Economic Variables
- Complexities from Plant Outages
- Revenue Forecasts and Price Scenarios
- Computation and evaluation of Pre-tax IRR

Operating Taxes and Project IRR

- Modelling Depreciation with Different Methods and Life
- Computation of Net Operating Loss with Min and Max
- After Tax Free Cash Flow in Project Finance Model
- Project IRR

Session 4: Corporate Models – Valuation and Scenario Analysis

Valuation Theory and Alternative Model Structures

- Drivers of Value – ROIC, Growth and Cost of Capital
- Stock Price Review and Alternative Cost of Capital Measurement
- Derivation of Multiples
- Difficulty in Applying Multiples
- Applying Value Driver Equations in Valuation

Incorporating Valuation in Corporate Models

- Flexible Modelling of Explicit Period and Terminal Period
- Timing and Discount Rates in Valuation
- Alternative Terminal Value Techniques
- Presentation of Valuation Ranges
- Bridge between Enterprise Value and Equity Value

Complexities in Corporate Modelling

- Normalised Terminal Value and Growth for Working Capital, Capital Expenditures, Deferred Taxes and Other Items
- Use of Alternative Multiples Reflecting Growth, Return and Cost of Capital

Alternative Methods for Using the Value Driver Formula in Terminal Value

- Sensitivity and scenario analysis
- Fundamentals of Scenario Analysis using INDEX
- Sensitivity Analysis and Spinner Boxes
- Combining Scenario and Sensitivity Analysis
- Scenario analysis with Macros and Data Tables
- Attribute Analysis and Tornado Diagrams

Session 6: Project Finance Models – Debt Structuring and Valuation

Debt Sizing and Sculpting

- Sizing of Debt from DSCR
- Evaluating Debt to Capital Constraint and DSCR Sizing
- Changing Interest Rates and SUMPRODUCT
- Computing Scheduled Repayments

Cash Flow Waterfall

- Fundamentals of Waterfall
- Modelling Defaults with MAX and MIN
- Modelling Cash Sweeps
- Cash Traps
- Debt Service Reserve Accounts

Structuring Model for Risk Analysis

- Creating Fixed Repayments and Debt Size
- Establishing Flexible Timing with Delay Scenarios
- Enabling Changes Between Risk Analysis and Structuring
- Modelling Defaults and Repayment of Defaults

Computation of Value and Other Issues

- Equity IRR and Equity Cash Flow
- Alternative Holding Periods and Equity IRR Measurement
- DSCR, PLCR and LLCR
- Re-financing

Instructor

Edward Bodmer provides financial and economic consulting services to a variety of clients, he teaches professional development courses in an assortment of modelling topics (project finance, M&A, and energy). He is passionate about teaching in Africa, South America, Asia and Europe. Many of the unique analytical concepts and modelling techniques he has developed have arisen from discussion with participants in his courses. Professor Bodmer has taught customized courses for MIT's Sloan Business School, Bank Paribas, Shell Oil, Society General, General Electric, HSBC, GDF Suez, Citibank, CIMB, Lind Lakers, HSBC, Saudi Aramco and many other energy and industrial clients. Bodmer's consulting activities include developing complex project finance, corporate and simulation models, providing expert testimony on financial and economic issues before energy regulatory agencies, and advisory services to support merger and acquisition projects.

Mr Bodmer has written a textbook titled Corporate and Project Finance Modelling, Theory and Practice published by Wiley Finance. The book introduces unique modelling techniques that address many complex issues that are not typically used by even the most experienced financial analysts. For example, it describes how to build user-defined functions to solve circular logic without cumbersome copy and paste macros; how to write function that derives the ratio of EV/EBITDA accounting for asset life, historical growth, taxes, return on investment, and cost of capital; and how to efficiently solve many project finance issues related to debt structuring. Bodmer is in the process of writing a second book that describes a series of valuation and analytical mistakes made in finance. This book uses many case studies from Harvard Business School that were thought to represent effective business strategies and later turned into valuation nightmares.

Professor Bodmer was formerly Vice President at the First National Bank of Chicago where he directed analysis of energy loans and also created financial modelling techniques used in advisory projects. He received an MBA specializing in econometrics (with honours) from the University of Chicago and a BSc in Finance from the University of Illinois (with highest university honours). Mr Bodmer was born in Manchester, England, he lived in Switzerland as a child, and currently resides in Chicago. You can find more information on his website www.edbodmer.com.