

Project finance modeling (course description)

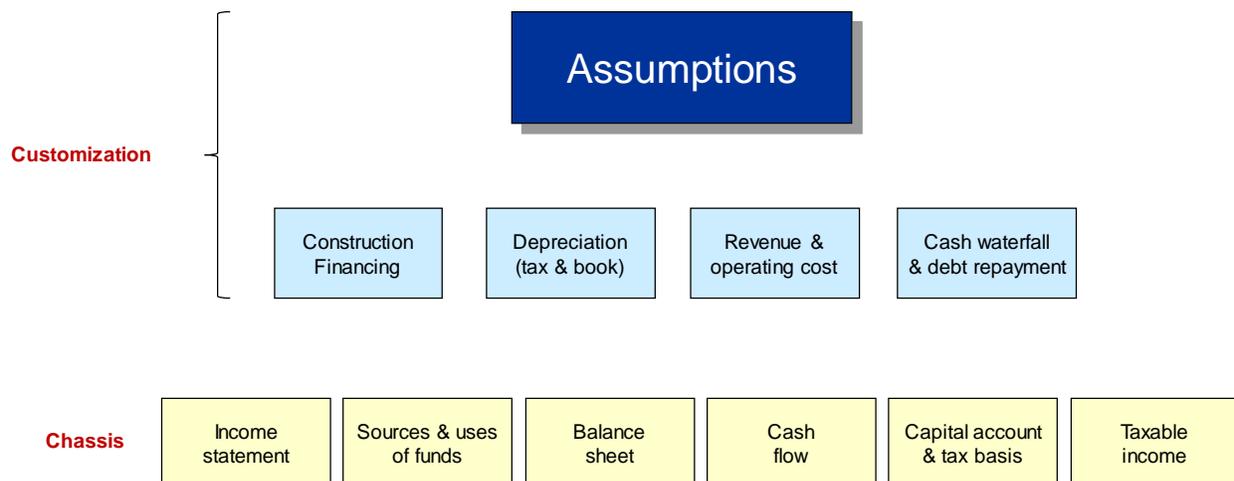
This course teaches a step-by-step approach to build a financial model for a project finance transaction. Participants are introduced to a Simplified Financial Model that is built around a chassis. The chassis incorporates the standard financial statements for a project (EBITDA, Income Statement, Sources & Uses of Funds, and Balance Sheet), capturing the fundamental interrelationships that do not change from one project to the next. This chassis includes tests which provide comfort that the model is consistent from an accounting perspective.

This model has separate spreadsheets for construction financing, depreciation, debt amortization, sales revenue, and operating costs; however, it models these in a simplistic manner, as these schedules are highly project-specific.

In addition to getting the accounting right, the Simplified Financial Model incorporates good modeling discipline with: switches to study different scenarios; automated schedules wherever possible; use of the same formula across any Excel row, separation of intermediate calculations from output; ability to print the model; etc.

The Simplified Financial Model has a separate spreadsheet to model the cash waterfall in any transaction. This single spreadsheet can readily be customized to capture the sophistication that is typical of any complex financial structure.

The overall approach is presented below:



The Simplified Financial Model is structured as a Limited Liability Company, as that seems to be the preferred approach for most project finance transactions. However, participants are taught how this can be adapted to reflect a corporate structure.

Course outline

- ✓ Getting started
 - Expectations
 - Modeling objectives
 - Timing (monthly, quarterly, annually)
 - Organization (assumptions, output, alternate cases, schedules)
 - Assumptions (focus on building a comprehensive, dynamic list)
 - What a model usually misses
- ✓ The flow of funds for a corporation
 - EBITDA
 - Net income
 - Sources & uses of funds
 - Balance sheet
 - Tax reporting
- ✓ Fundamental accounting identities for a corporation
 - Depreciation (for financial reporting and taxes)
 - Test if cumulative deferred taxes go to zero
 - Income (financial reporting versus tax)
 - Test if cumulative total income is the same
 - Dividends
 - Cash flow
 - Test if cumulative Net income = Dividends = Cash flow
- ✓ Flow of funds for a Limited Liability Company
 - EBITDA
 - Net income
 - Sources & uses of funds
 - Balance sheet
 - Tax reporting
 - Capital account & tax basis
- ✓ NPV and IRR concepts
 - Spot quiz on NPV
 - Spot quiz on IRR
- ✓ Modeling tips
- ✓ Modeling approach
- ✓ Exercise 1: Using the SUMIF function to cumulate a monthly model into calendar quarters and years
- ✓ Exercise 2: Calculating the operating factors in the stub year for: (a) variable O&M cost and revenues; and (b) fixed O&M cost
- ✓ Exercise 3: Using hourly generation data to determine quarterly and annual figures (for renewable energy projects)
- ✓ Simplified Financial Model
 - Assumptions
 - Construction financing
 - Depreciation
 - EBITDA
 - Cash Waterfall and debt repayment
 - Income statement
 - Sources and uses of funds

- Balance sheet
- Taxable income and taxes
- Cash Flow
- Capital account and tax basis
- ✓ Walk through of each spreadsheet, explaining key formulas
- ✓ Individual workshop
 - Review Simplified Financial Model
 - Perform sensitivity analysis
 - Feedback
- ✓ Advanced structuring concepts
 - Retention accounts, debt sculpting, cash sweeps, etc.
- ✓ Example illustrating how the Simplified Financial Model was used to develop a model for a real-life biomass deal

Duration

2 days.

Pre-requisites and who should attend?

While any fresh MBA certainly can learn a lot from this course, it is essential that a participant has good experience with Excel and Accounting. Those who have worked on project finance deals, or need to develop project finance models, will find the course to be particularly helpful.

This is a practical workshop for analysts and associates from any department in a financial institution:

- ✓ Project finance;
- ✓ Structured finance;
- ✓ Asset management;
- ✓ Real estate; or
- ✓ Corporate finance

It also may be a useful refresher for middle-to-senior project finance professionals and other participants in a project finance transaction who need to use a model for structuring the deal or analyzing financial returns.

What can participants get out of it?

Participants will obtain a very comprehensive and practical understanding of the fundamentals of financial modeling. They will also receive a copy of the Simplified Financial Model along with a detailed explanation of the formulas and logic, supplemented with hands-on training and exercises. After this module, participants should be in a better position to create a sophisticated model for their transactions by using the Simplified Financial Model as the starting point.

Instructor

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