

Building a Financial Model

Of a Bank

Summary

This course reviews the unique modeling and valuation requirement of banks.

The course reviews a case study for a small bank with a diversified loan portfolio and investment strategy. Other operations such as credit cards will be explored as well as regulatory requirements and their influence on the bank's financial performance.

Various intermediate Excel tools along with helpful keyboard shortcuts will also be covered throughout the course.



Prerequisites

Participants should have a basic working knowledge of Excel and the banking sector prior to taking this course.



Timing

This course requires 8 - 16 hours, depending on the amount of material to be covered.

Learning Topics

1. Design and Structure a Bank Model

- ✓ Design a clear and logical financial model
- ✓ Model revenue properly by forecasting loan portfolio growth
- ✓ Model Provisions for Credit Losses ("PCL") and how it flows through the financial statements
- ✓ Design a powerful scenario manager with advanced controls
- ✓ Understand the funding model of a bank including deposit modeling and internal funding transfers
- ✓ Forecast Net Interest Income ("NII") and forecast spreads
- ✓ Model Non-Interest Expenses ("NIE") and the importance of compensation modeling

2. Incorporate Capital Structure, Regulatory and Operating Ratios

- ✓ Incorporate Risk Weighted Assets ("RWA") calculations along with capital calculations
- ✓ Common regulatory ratios and capital definitions (such as Tier 1 Capital, Total Capital Ratio, etc.)
- ✓ Project dividends and other equity measures
- ✓ Model subordinated debt and other sources of capital for a bank

3. Bank Valuation & Controls

- ✓ Review the use of common comparable valuation metrics and discuss why many traditional value metrics are unsuitable
- ✓ Use two common methods for bank valuation:
 - Dividend Discount Model ("DDM")
 - Residual Income Model
- ✓ Add various flags and other model features to ensure regulatory compliance