FINANCIAL MODELING INSTITUTE

AFM Body Of Knowledge Summary

Level 1:
Advanced financial modeler (AFM)

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I. Financial Modeling Best Practices

Introduction

This document Is a summary of the AFM Body of Knowledge. The AFM Body of Knowledge Is only available to registered candidates of the AFM exam and partners of the FMI.

The AFM Body of Knowledge Is a reference document that contains the core knowledge, competencies and topics that form the basis of the grading rubric for the AFM exam. This material represents FMI mandated best-practices and even contains our guidance on Excel shortcuts. A successful AFM exam will be built In accordance with this content.

This AFM Body of Knowledge Summary Is available to the public to:

- Demonstrate the topics covered in the full Body of Knowledge
- Enable prospective candidates to decide if AFM certification is right for them
- Communicate to employers and the broader industry what the AFM designation stands for

The AFM exam is the first of three levels of modeling certifications offered by the Financial Modeling Institute.

For purposes of the AFM exam and this AFM Body of Knowledge Summary, a financial model is considered to be a spreadsheet forecast model of a company.

I. Financial Modeling Best Practices

1. Modeling as a Discipline

- Financial Modeling is a unique professional discipline
- A financial model needs to serve as a powerful communication tool to clearly and effectively tell the story of a company to management and stakeholders
- A financial model is a critical decision-making tool that allows users to make accurate and informed financial decisions about a company
- A builder of financial models requires skills in accounting, finance, spreadsheets and overall business knowledge in order to effectively forecast a company's financial statements into the future

2. Modeling as a Discipline

- To achieve the goals set out above, a model needs to be developed with the following attributes:
    - **a. Dynamic:** changes to assumptions properly flow through the model
    - **b. Flexible:** modular in order to facilitate easy expansion and changes to the model
    - **d. Intuitive:** layout/flow mirrors how people think about the business
    - **d. Transparent:** easy to follow with no giant formulas or hidden sections
    - **e. Printable:** in a clear and easy-to-read format on paper
    - **f. Transferable:** built by one person but usable by many
- When a model achieves the criteria above, it creates tremendous credibility for the builder and inspires confidence with the reader
- A well-designed model needs to work in two ways:
    - Electronically – a model must be simple to review / audit / manipulate in a spreadsheet to ensure it can be used as a tool in the decision-making process
    - In printed format – many senior executives and other decision makers prefer to review financial analysis on paper or as PDF documents (rather than reviewing a spreadsheet)
- The full AFM Body of Knowledge document has been developed to enable model builders to create models of the highest caliber that achieve the conditions set out above
- Successfully completing the AFM exam will require knowledge and understanding of the concepts in this document

I. Financial Modeling Best Practices

3. Model Planning

- It is critical to properly plan and design a model before it can be built
    - Whenever a model becomes filled with errors, it is often because the modeler did not properly devise a model plan.
- The full AFM Body of Knowledge document reviews the process of properly planning a model

4. Design & Presentation

- The design of a model is critical to ensure that it conveys information clearly and professionally
- The full AFM Body of Knowledge document includes a number of critical design tips and considerations to create a powerful financial model.

5. Tab Structure

- Models can be designed in either a vertical or horizontal manner. For the purposes of the AFM exam, either approach is acceptable.
    - A vertical model refers to a model in which most of the schedules and financial statements are built on the same tab within the Excel file
    - A horizontal model refers to a model in which most of the schedules and financial statements are built on different tabs within the Excel file

- The full AFM Body of Knowledge document includes a number of critical design tips and considerations to create a powerful financial model.
- In addition, the Publicly Available Learning Materials on the FMI website contains a sample vertical and a sample horizontal model.

6. Model Construction Tips

- The full AFM Body of Knowledge contains nuerous model construction tips that relate to the following topics: Structural Tips, Formatting Tips, Formula Tips, and Model Circularity

II. Excel Skills

1. Excel Tools

- Excel is the dominant spreadsheet software used worldwide and therefore used on the exam
- It is important to be able to work quickly and efficiently with Excel in order to build powerful financial models
- The full AFM Body of Knowledge provides tips on the following topics:
    - Formatting Skills including Custom Formatting
    - Lookup Functions
    - Absolute References
    - Paste Special
    - IF Statements
    - Conditional Formatting
    - Forms and Drop-Down Boxes
    - Printing

III. Keyboard Shortcuts

1. Shortcuts

- Every advanced Excel user needs to understand the importance of using keyboard shortcuts
    - It is the quickest way to work in Excel, saving significant amounts of time by not reaching for and using the mouse
    - It is the most efficient and accurate way to work in Excel, maximizing productivity
- There are many keyboard shortcuts in Excel, and they vary regionally and by operating system
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- **Model builders should be comfortable with the following categories of shortcuts:**
    a. Navigating shortcuts
    b. Selecting Cells
    c. Function Keys
    d. Function Shortcuts
    e. Formatting Shortcuts
    f. Editing Shortcuts
    g. ALT Navigation Key Shortcuts (on a PC)

IV. Scenario Analysis

1. Scenario Analysis

- Flexibility in models is critical, as stakeholders typically like to know what the impacts of changing key drivers would do to the overall business under various scenarios (ie. Base Case, Best Case, Worst Case…)

    - **Key drivers are assumptions that are difficult to forecast, hard to control, and they materially affect the business. These can include:**
        - Sales Price
        - Sale Volume Growth
        - Cost Inflation
        - Currency Exchange Rates
        - Input Costs
    - An effective model should be able to switch between different operating cases, or scenarios, and these assumptions should dynamically flow through the model and ultimately through to the financial statements

- The full AFM Body of Knowledge provides a discussion of scenario analysis and a review of key technical skills needed to create a scenario analysis

V. Model Components

1. Financial Statements

- It is crucial for model builders to have a solid grasp of accounting fundamentals in order to understand the linkages between the various numbers on the financial statements
- A financial model of a company will typically contain the following financial statements
    a. Statement of Earnings (Income Statement)
    b. Statement of Cash Flows (Cash Flow Statement)
    c. Statement of Financial Position (Balance Sheet)
- A financial model of a company may also include other statements:
    a. Statement of Comprehensive Income
    b. Statement of Changes in Shareholder's Equity
    c. Sector-specific statements (i.e. for banks)
- It is critical to understand the framework of each statement and connectivity to other sheets within the workbook

2. Model Schedules

- For a financial model of a company, the model should also include a number of schedules to calculate the values that will be required on the financial statements

- The most common schedules to include in a model are:
    a. **Operating Schedules**
        i. Revenue Schedule
        ii. Operating Cost Schedule
        iii. Capex / Depreciation Schedule
        iv. Income Tax Schedule
        v. Working Capital Schedule
    b. **Capital Structure Schedules**
        i. Debt Schedule
        ii. Equity Schedule

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About the FMI

We are dedicated to excellence in Financial Modeling and offer globally recognized certifications.