



FINANCIAL STATEMENT ANALYSIS

CFA[®] Program Curriculum
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CONTENTS

How to Use the CFA Program Curriculum		xi
CFA Institute Learning Ecosystem (LES)		xi
Designing Your Personal Study Program		xi
Errata		xii
Other Feedback		xii
Financial Statement Analysis		
Learning Module 1	Introduction to Financial Statement Analysis	3
	Introduction	4
	Financial Statement Analysis Framework	5
	Articulate the Purpose and Context of the Analysis	6
	Collect Data	7
	Process Data	7
	Analyze/Interpret the Data	8
	Develop and Communicate Conclusions and Recommendations	8
	Follow-Up	9
	Scope of Financial Statement Analysis	9
	Regulated Sources of Information	13
	International Organization of Securities Commissions	13
	US Securities and Exchange Commission	14
	Capital Markets Regulation in Europe	17
	Financial Notes and Supplementary Schedules	18
	Business and Geographic Segment Reporting	19
	Management Commentary or Management’s Discussion and Analysis	21
	Auditor’s Reports	22
	Comparison of IFRS with Alternative Financial Reporting Systems	27
	Monitoring Developments in Financial Reporting Standards	28
	New Products or Types of Transactions	28
	Evolving Standards and the Role of CFA Institute	28
	Other Sources of Information	30
	<i>Practice Problems</i>	32
	<i>Solutions</i>	35
Learning Module 2	Analyzing Income Statements	37
	Introduction	38
	Revenue Recognition	39
	General Principles	39
	Accounting Standards for Revenue Recognition	40
	Expense Recognition	45
	General Principles	45
	Capitalization versus Expensing	47
	Capitalization of Interest Costs	55
	Capitalization of Internal Development Costs	58

	Implications for Financial Analysts: Expense Recognition	62
	Non-Recurring Items	63
	Unusual or Infrequent Items	63
	Discontinued Operations	65
	Changes in Accounting Policy	65
	Changes in Scope and Exchange Rates	68
	Earnings per Share	69
	Simple versus Complex Capital Structure	69
	Basic EPS	70
	Diluted EPS: The If-Converted Method	72
	Diluted EPS When a Company Has Convertible Preferred Stock	
	Outstanding	72
	Diluted EPS When a Company Has Convertible Debt Outstanding	73
	Diluted EPS: The Treasury Stock Method	74
	Other Issues with Diluted EPS and Changes in EPS	77
	Changes in EPS	78
	Income Statement Ratios and Common-Size Analysis	78
	Common-Size Analysis of the Income Statement	78
	Income Statement Ratios	81
	<i>Practice Problems</i>	84
	<i>Solutions</i>	88
Learning Module 3	Analyzing Balance Sheets	91
	Introduction	92
	Intangible Assets	93
	Identifiable Intangibles	94
	Goodwill	97
	Financial Instruments	100
	Non-Current Liabilities	104
	Long-Term Financial Liabilities	105
	Deferred Tax Liabilities	106
	Ratios and Common-Size Analysis	107
	Common-Size Analysis of the Balance Sheet	107
	Some interesting general observations can be made from these data:	110
	Balance Sheet Ratios	114
	<i>Practice Problems</i>	117
	<i>Solutions</i>	121
Learning Module 4	Analyzing Statements of Cash Flows I	123
	Introduction	124
	Linkages between the Financial Statements	125
	Primary Financial Statements	125
	Relationship between Financial Statements	125
	Linkages Between Current Assets and Current Liabilities	127
	The Direct Method for Cash Flows from Operating Activities	131
	Operating Activities: Direct Method	132
	The Indirect Method for Cash Flows from Operating Activities	137
	Operating Activities: Indirect Method	138

	Conversion from the Indirect to Direct Method	140
	Method to Convert Cash Flow from Indirect to Direct	140
	Cash Flows from Investing Activities	141
	Cash Flows from Investing Activities	142
	Cash Flows from Financing Activities	144
	Cash Flow from Financing activities: Long-Term Debt and Common Stock	145
	Computing Dividends Paid	145
	Differences in Cash Flow Statements Prepared under US GAAP versus IFRS	146
	<i>Practice Problems</i>	149
	<i>Solutions</i>	153
Learning Module 5	Analyzing Statements of Cash Flows II	155
	Introduction	155
	Evaluating Sources and Uses of Cash	156
	Step 1. Evaluate the major sources and uses of cash flow	156
	Step 2. Evaluate the primary determinants of operating cash flow	156
	Step 3. Evaluate the primary determinants of investing cash flow	157
	Step 4. Evaluate the primary determinants of financing cash flow	157
	Ratios and Common-Size Analysis	160
	Free Cash Flow Measures	166
	Cash Flow Statement Analysis: Cash Flow Ratios	168
	<i>Practice Problems</i>	171
	<i>Solutions</i>	172
Learning Module 6	Analysis of Inventories	173
	Introduction	174
	Inventory Valuation	175
	The Effects of Inflation and Deflation on Inventories, Costs of Sales, and Gross Margin	182
	Presentation and Disclosure	184
	Presentation and Disclosure	184
	Inventory Ratios	185
	<i>Practice Problems</i>	192
	<i>Solutions</i>	204
Learning Module 7	Analysis of Long-Term Assets	209
	Introduction	209
	Acquisition of Intangible Assets	210
	Intangible Assets Purchased in Situations Other Than Business Combinations	211
	Intangible Assets Developed Internally	211
	Intangible Assets Acquired in a Business Combination	213
	Impairment and Derecognition of Assets	215
	Impairment of Property, Plant, and Equipment	215
	Impairment of Intangible Assets with a Finite Life	217
	Impairment of Intangibles with Indefinite Lives	217
	Impairment of Long-Lived Assets Held for Sale	217

	Reversals of Impairments of Long-Lived Assets	218
	Derecognition	218
	Presentation and Disclosure	220
	Using Disclosures in Analysis	227
	<i>Practice Problems</i>	231
	<i>Solutions</i>	238
Learning Module 8	Topics in Long-Term Liabilities and Equity	241
	Introduction	242
	Leases	243
	Requirements for Lease Accounting	243
	Examples of Leases	244
	Advantages of Leasing	244
	Lease Classification as Finance or Operating	245
	Financial Reporting of Leases	246
	Lessee Accounting—IFRS	247
	Lessee Accounting—US GAAP	248
	Lessor Accounting	251
	Financial Reporting for Postemployment and Share-Based Compensation	
	Plans	253
	Employee Compensation	253
	Deferred Compensation	253
	Defined-Benefit Pension Plans	254
	Accounting for Defined-Benefit Plans under IFRS	254
	Accounting for Defined-Benefit Plan under US GAAP	255
	Pension-Related Disclosures	256
	Share-Based Compensation	257
	Stock Grants	259
	Stock Options	260
	Accounting for Stock Options	261
	Other Types of Share-Based Compensation	263
	Presentation and Disclosure	264
	Presentation and Disclosure of Leases	264
	Lessee Disclosure	264
	Lessor Disclosure	266
	Presentation and Disclosure of Postemployment Plans	267
	Presentation and Disclosure of Share-Based Compensation	269
	<i>Practice Problems</i>	272
	<i>Solutions</i>	275
Learning Module 9	Analysis of Income Taxes	277
	Introduction	278
	Differences between Accounting Profit and Taxable Income	279
	Taxable Temporary Differences	280
	Deductible Temporary Differences	280
	Taxable and Deductible Temporary Differences	280
	Permanent Differences	282
	Tax Expense	283

	Deferred Tax Assets and Liabilities	283
	Realizability of Deferred Tax Assets	284
	Corporate Income Tax Rates	290
	Presentation and Disclosure	297
	<i>Practice Problems</i>	306
	<i>Solutions</i>	309
Learning Module 10	Financial Reporting Quality	311
	Introduction	312
	Conceptual Overview	313
	Conceptual Overview	314
	GAAP, Decision Useful Financial Reporting	315
	GAAP, Decision-Useful, but Sustainable?	316
	Biased Accounting Choices	317
	Within GAAP, but “Earnings Management”	325
	Departures from GAAP	326
	Differentiate between Conservative and Aggressive Accounting	327
	Conservatism in Accounting Standards	328
	Bias in the Application of Accounting Standards	330
	Context for Assessing Financial Reporting Quality	331
	Motivations	331
	Conditions Conducive to Issuing Low-Quality Financial Reports	332
	Mechanisms That Discipline Financial Reporting Quality	333
	Market Regulatory Authorities	333
	Auditors	335
	Private Contracting	339
	Detection of Financial Reporting Quality Issues: Introduction and Presentation Choices	340
	Presentation Choices	341
	Accounting Choices and Estimates	347
	How Accounting Choices and Estimates Affect Earnings and Balance Sheets	348
	Accounting Choices That Affect the Cash Flow Statement	359
	Accounting Choices that Affect Financial Reporting	362
	Warning Signs	366
	Pay Attention to Revenue	366
	Pay Attention to Signals from Inventories	367
	Pay Attention to Capitalization Policies and Deferred Costs	368
	Pay Attention to the Relationship between Cash Flow and Net Income	368
	Look for Other Potential Warnings Signs	368
	<i>References</i>	372
	<i>Practice Problems</i>	373
	<i>Solutions</i>	377
Learning Module 11	Financial Analysis Techniques	381
	Introduction	382
	The Financial Analysis Process	383

The Objectives of the Financial Analysis Process	384
Distinguishing between Computations and Analysis	385
Analytical Tools and Techniques	387
Financial Ratio Analysis	390
The Universe of Ratios	391
Value, Purposes, and Limitations of Ratio Analysis	393
Sources of Ratios	394
Common Size Balance Sheets and Income Statements	395
Common-Size Analysis of the Income Statement	396
Cross-Sectional, Trend Analysis, and Relationships in Financial Statements	397
Trend Analysis	398
Relationships Among Financial Statements	400
The Use of Graphs and Regression Analysis	401
Regression Analysis	403
Common Ratio Categories, Interpretation, and Context	403
Interpretation and Context	404
Activity Ratios	405
Calculation of Activity Ratios	405
Interpretation of Activity Ratios	407
Liquidity Ratios	411
Calculation of Liquidity Ratios	412
Interpretation of Liquidity Ratios	412
Solvency Ratios	416
Calculation of Solvency Ratios	416
Interpretation of Solvency Ratios	417
Profitability Ratios	420
Calculation of Profitability Ratios	420
Interpretation of Profitability Ratios	421
Integrated Financial Ratio Analysis	424
The Overall Ratio Picture: Examples	424
DuPont Analysis—The Decomposition of ROE	426
Industry-Specific Financial Ratios	432
Model Building and Forecasting	433
<i>References</i>	435
<i>Practice Problems</i>	436
<i>Solutions</i>	443
Learning Module 12	
Introduction to Financial Statement Modeling	447
Introduction	448
Building a Financial Statement Model	449
Company Overview	449
Revenue Forecast	451
COGS	452
SG&A Expenses and Other Operating Expenses	452
Operating Profit by Segment	453
Non-Operating Items	454
Corporate Income Tax Forecast	455
Shares Outstanding	455

Pro Forma Income Statement	456
Pro Forma Statement of Cash Flows	458
Capital Investments and Depreciation Forecasts	458
Working Capital Forecasts	459
Forecasted Cash Flow Statement	460
Forecasted Balance Sheet	461
Valuation Model Inputs	462
Behavioral Finance and Analyst Forecasts	462
Overconfidence in Forecasting	462
Illusion of Control	464
Conservatism Bias	465
Representativeness Bias	466
Confirmation Bias	467
The Impact of Competitive Factors in Prices and Costs	468
Cognac Industry Overview	469
Modeling Inflation and Deflation	478
Sales Projections with Inflation and Deflation	478
Cost Projections with Inflation and Deflation	483
The Forecast Horizon and Long-Term Forecasting	486
Case Study: Estimating Normalized Revenue	487
<i>References</i>	492
<i>Practice Problems</i>	493
<i>Solutions</i>	500
Glossary	G-1

How to Use the CFA Program Curriculum

The CFA® Program exams measure your mastery of the core knowledge, skills, and abilities required to succeed as an investment professional. These core competencies are the basis for the Candidate Body of Knowledge (CBOK™). The CBOK consists of four components:

A broad outline that lists the major CFA Program topic areas (www.cfainstitute.org/programs/cfa/curriculum/cbok/cbok)

Topic area weights that indicate the relative exam weightings of the top-level topic areas (www.cfainstitute.org/en/programs/cfa/curriculum)

Learning outcome statements (LOS) that tell you the specific knowledge, skills, and abilities you should gain from each curriculum topic area. You will find these statements at the start of each learning module and lesson. We encourage you to review the information about the LOS on our website (www.cfainstitute.org/programs/cfa/curriculum/study-sessions), including the descriptions of LOS “command words” on the candidate resources page at www.cfainstitute.org/-/media/documents/support/programs/cfa-and-cipm-los-command-words.ashx.

The CFA Program curriculum that candidates receive access to upon exam registration.

Therefore, the key to your success on the CFA exams is studying and understanding the CBOK. You can learn more about the CBOK on our website: www.cfainstitute.org/programs/cfa/curriculum/cbok.

The curriculum, including the practice questions, is the basis for all exam questions. The curriculum is selected/developed specifically to provide candidates with the knowledge, skills, and abilities reflected in the CBOK.

CFA INSTITUTE LEARNING ECOSYSTEM (LES)

Your exam registration fee includes access to the CFA Institute Learning Ecosystem (LES). This digital learning platform provides access to all the curriculum content and practice questions. The LES is organized as a series of learning modules consisting of short online lessons and associated practice questions. This tool is your source for all study materials, including practice questions and mock exams. The LES is the primary method by which CFA Institute delivers your curriculum experience. Here, you will find additional practice questions to test your knowledge, including some interactive questions.

DESIGNING YOUR PERSONAL STUDY PROGRAM

An orderly, systematic approach to exam preparation is critical. You should dedicate a consistent block of time every week to reading and studying. Review the LOS both before and after you study curriculum content to ensure you can demonstrate

the knowledge, skills, and abilities described by the LOS and the assigned learning module. Use the LOS as a self-check to track your progress and highlight areas of weakness for later review.

Successful candidates report an average of more than 300 hours preparing for each exam. Your preparation time will vary based on your prior education and experience, and you will likely spend more time on some topics than on others.

ERRATA

The curriculum development process is rigorous and involves multiple rounds of reviews by content experts. Despite our efforts to produce a curriculum that is free of errors, we must make corrections in some instances. Curriculum errata are periodically updated and posted by exam level and test date on the Curriculum Errata webpage (www.cfainstitute.org/en/programs/submit-errata). If you believe you have found an error in the curriculum, you can submit your concerns through our curriculum errata reporting process found at the bottom of the Curriculum Errata webpage.

OTHER FEEDBACK

Please send any comments or suggestions to info@cfainstitute.org, and we will review your feedback thoughtfully.

Financial Statement Analysis

LEARNING MODULE

1

Introduction to Financial Statement Analysis

by Elaine Henry, PhD, CFA, J. Hennie van Greuning, DCom, CFA, and Thomas R Robinson, PhD, CFA, CAIA.

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LEARNING OUTCOMES

<i>Mastery</i>	<i>The candidate should be able to:</i>
<input type="checkbox"/>	describe the steps in the financial statement analysis framework
<input type="checkbox"/>	describe the roles of financial statement analysis
<input type="checkbox"/>	describe the importance of regulatory filings, financial statement notes and supplementary information, management's commentary, and audit reports
<input type="checkbox"/>	describe implications for financial analysis of alternative financial reporting systems and the importance of monitoring developments in financial reporting standards
<input type="checkbox"/>	describe information sources that analysts use in financial statement analysis besides annual and interim financial reports

The two major accounting standard setters are as follows: 1) the International Accounting Standards Board (IASB) who establishes International Financial Reporting Standards (IFRS) and 2) the Financial Accounting Standards Board (FASB) who establishes US GAAP. Throughout this learning module both standards are referred to and many, but not all, of these two sets of accounting rules are identified. Note: changes in accounting standards as well as new rulings and/or pronouncements issued after the publication of this learning module may cause some of the information to become dated.

1

INTRODUCTION

Financial analysis is the process of interpreting and evaluating a company's performance and position in the context of its economic environment. Financial analysis is used by analysts to make decisions and recommendations such as whether to invest in a company's debt or equity securities and at what price. A debt investor is concerned about a company's ability to pay interest and to repay the principal lent, while an equity investor is interested in a company's profitability and per-share value. Overall, a central focus of financial analysis is evaluating the company's ability to earn a return on its capital that is at least equal to the cost of that capital, to profitably grow its operations, and to generate enough cash to meet obligations and pursue opportunities.

Financial analysis starts with the information found in a company's financial reports. These financial reports include audited financial statements, additional disclosures required by regulatory authorities, and any accompanying (unaudited) commentary by management. Analysts supplement their analysis of a company's financial statements with industry and company research.

LEARNING MODULE OVERVIEW



- Financial analysis for a company often includes obtaining an understanding of the target company's business model, financial performance, financial position, and broader information about the economic environment and the industry in which the company operates. When analytical tasks are not well defined, the analyst may need to make decisions about the approach, the tools, the data sources, the format for reporting the results, and the relative importance of different aspects of the analysis.
- Financial analysis will include evaluating financial results, and structuring and scaling data to facilitate comparisons by calculating percentages, changes, and ratios. Answers to analytical questions often rely not just on numerical results but also on the analyst's interpretation of the numerical results to support a conclusion or recommendation.
- The role of financial statement analysis is to form expectations about a company's future performance, financial position, and risk factors for the purpose of making investment, credit, and other economic decisions.
- Regulatory authorities require publicly traded companies to prepare financial reports in accordance with specified accounting standards and other securities laws and regulations. An example of such a regulatory authority is the Securities and Exchange Commission in the United States.
- Other organizations exist without explicit regulatory authority and develop reporting standards, facilitate cooperation, and advise governments. Examples include the International Organization of Securities Commissions, the European Securities Committee, and the European Securities and Market Authority.
- Sources of information for analysts and investors include standardized forms that are filed with regulatory authorities, disclosures made in notes, supplementary schedules, and management commentary that accompany financial statements, and audit reports. In an audit report, an independent auditor expresses an opinion on whether the

information in the audited financial statements fairly presents the financial position, performance, and cash flows of the company in accordance with a specified set of accounting standards.

- Despite increasing convergence over time, differences still exist between IFRS (International Financial Reporting Standards) and US GAAP (Generally Accepted Accounting Principles) that affect financial reporting. Analysts must be aware of areas where accounting standards have not converged.
- In addition to information required by regulatory authorities, issuers also communicate through earnings calls, investor day events, press releases, company websites, and company visits. Analysts may also get information by speaking with management, investor relations, and other company personnel.
- Third-party sources for additional information include industry whitepapers, analyst reports, economic information from governments, general and industry-specific news outlets, and electronic data platforms. Analysts also use surveys, conversations, and product evaluations to generate their own information.

FINANCIAL STATEMENT ANALYSIS FRAMEWORK

2

- describe the steps in the financial statement analysis framework

Analysts work in a variety of positions within the investment management industry. Some are equity analysts whose main objective is to evaluate potential investments in a company's equity securities as a basis for deciding whether a prospective investment is attractive and what an appropriate purchase price might be. Others are credit analysts who evaluate the creditworthiness of a company to decide whether (and on what terms) a debt investment should be made or what credit rating should be assigned. Analysts may also be involved in a variety of other tasks, such as evaluating the performance of a subsidiary company, evaluating a private equity investment, or finding stocks that are overvalued for purposes of taking a short position.

Exhibit 1 presents a generic framework for financial statement analysis used in these various roles.

Exhibit 1: Financial Statement Analysis Framework

Phase	Sources of Information	Output
Articulate the purpose and context of the analysis.	<ul style="list-style-type: none"> ▪ The nature of the analyst's function, such as evaluating an equity or debt investment or issuing a credit rating. ▪ Communication with client or supervisor on specific needs and concerns. ▪ Institutional guidelines related to developing specific work product. 	<ul style="list-style-type: none"> ▪ Statement of the purpose or objective of analysis. ▪ A list (written or unwritten) of specific questions to be answered by the analysis. ▪ Nature and content of report to be provided. ▪ Timetable and budgeted resources for completion.
Collect data.	<ul style="list-style-type: none"> ▪ Financial statements, other financial data, questionnaires, and industry/economic data. ▪ Discussions with issuer investor relations, management, suppliers, customers, competitors, and company or industry experts. ▪ Company site visits (e.g., to production facilities or retail stores). 	<ul style="list-style-type: none"> ▪ Financial statements and other quantitative data in a usable form, such as a spreadsheet. ▪ Completed questionnaires, if applicable.
Process data.	Data from the previous phase.	<ul style="list-style-type: none"> ▪ Adjusted financial statements. ▪ Common-size statements. ▪ Ratios and graphs.
Analyze/interpret the data.	Input data as well as processed data.	<ul style="list-style-type: none"> ▪ Analytical results. ▪ Forecasts. ▪ Valuations.
Develop and communicate conclusions and recommendations (e.g., with an analysis report).	<ul style="list-style-type: none"> ▪ Analytical results and previous reports. ▪ Institutional guidelines for published reports. 	<ul style="list-style-type: none"> ▪ Analytical report answering questions posed in Phase 1. ▪ Recommendation regarding the purpose of the analysis, such as whether to make an investment or extend credit.
Follow-up.	Information gathered by periodically repeating the previous steps as necessary to determine whether changes to holdings or recommendations are necessary.	<ul style="list-style-type: none"> ▪ Comparison of actual to expected results ▪ Revised forecasts ▪ Updated reports and recommendations.

The following sections discuss the individual phases of financial statement analysis.

Articulate the Purpose and Context of the Analysis

Before undertaking any analysis, it is essential to understand the purpose of the analysis. An understanding of the purpose is particularly important in financial statement analysis because of the numerous available techniques and the substantial amount of data.

Some analytical tasks are well defined, in which case articulating the purpose of the analysis requires little decision making by the analyst. For example, a periodic credit review of an investment-grade debt portfolio or an equity analyst's quarterly report on a particular company may be guided by institutional norms such that the purpose of the analysis is given. Furthermore, the format, procedures, or sources of information may also be given.

For other analytical tasks, articulating the purpose of the analysis requires the analyst to make decisions about the approach, the tools, the data sources, the format in which to report the results of the analysis, and the relative importance of different aspects of the analysis.

When facing a substantial amount of data, a less experienced analyst may be tempted to start calculating ratios without considering what is relevant for the decision at hand. It is generally advisable to resist this temptation and thus avoid unnecessary or pointless efforts. Consider the questions: If you could have all the calculations and ratios completed instantly, what question would you be able to answer? What decision would your answer support?

The analyst should also define the context at this stage. Who is the intended audience? What is the deliverable—for example, a final report explaining conclusions and recommendations? What is the time frame (i.e., when is the report due)? What resources and resource constraints are relevant to completion of the analysis? Again, the context may be predefined (i.e., standard and guided by institutional norms).

Having clarified the purpose and context of the financial statement analysis, the analyst should next compile the specific questions to be answered by the analysis. For example, if the purpose of the financial statement analysis (or, more likely, a stage of a larger analysis) is to compare the historical performance of three companies operating in a particular industry, specific questions would include the following: What has been the relative growth rate of the companies, and what has been their relative profitability?

Collect Data

Next, the analyst obtains information required to answer the specific questions. A key part of this step is obtaining an understanding of the target company's business model, financial performance, and financial position (including trends over time and relative to peer companies). Financial statement data alone may be adequate in some cases. For example, to screen a large number of companies to find those with a minimum level of historical profitability or sales growth, financial statement data alone would be adequate. But to address more in-depth questions, such as why and how one company performed better or worse than its competitors, additional information would be required.

Furthermore, information on the economy and industry is necessary to understand the environment in which the company operates. Analysts often take a top-down approach whereby they (1) gain an understanding of an issuer's macroeconomic environment, such as prospects for growth in the economy and inflation; (2) analyze the prospects of the industry in which the company operates, based on the expected macroeconomic environment; and (3) determine the prospects for the company given the expected industry and macroeconomic environments. For example, an analyst may need to forecast future growth in earnings for a company. Past company data provide the platform for statistical forecasting; however, an understanding of economic and industry conditions and an outlook for them can improve the analyst's ability to make forecasts.

Process Data

After obtaining the requisite financial and other information, the analyst processes these data using appropriate analytical tools. For example, processing the data may involve computing ratios or growth rates; preparing common-size financial statements; creating charts; performing statistical analyses, such as regressions or Monte Carlo simulations; making forecasts; performing valuations; performing sensitivity

analyses; or using any other analytical tools or combination of tools that are available and appropriate for the task. A comprehensive financial analysis at this stage may include the following:

- Reading and evaluating financial results for each company being analyzed. This includes understanding any factors that may affect comparability between companies, such as differences in business models, operating decisions (e.g., leasing versus purchasing fixed assets), accounting policies (e.g., when to report revenue on the income statement), and tax jurisdictions.
- Making any needed adjustments to the financial statements or using alternative measures to facilitate comparison. Note that commonly used databases do not always make such analyst adjustments.
- Preparing or collecting common-size financial statement data (which scale data to directly reflect percentages [e.g., of sales] or changes [e.g., from the prior year]) and financial ratios (which are measures of various aspects of corporate performance based on financial statement elements. Analysts can use these to evaluate a company's relative profitability, liquidity, leverage, efficiency, and valuation in relation to past results or peers.

Analyze/Interpret the Data

Once the data have been processed, the next step—critical to any analysis—is to interpret the output. The answer to a specific question is seldom the numerical answer alone. Rather, the answer relies on the analyst's interpretation of the output, and the use of this interpreted output to support a conclusion or recommendation. The answers to the specific analytical questions may themselves achieve the underlying purpose of the analysis, but usually, a conclusion or recommendation is required. For example, an equity analysis may involve forecasts of earnings, free cash flow, and a range of fair value estimates that would be used to issue a buy, hold, or sell recommendation. A credit analyst may also create forecasts of free cash flow, interest coverage, and leverage in support of an investment decision.

Develop and Communicate Conclusions and Recommendations

Communicating the conclusion or recommendation in an appropriate format is the next step. The appropriate format will vary by analytical task, by institution, or by audience. For example, an equity analyst's report for external distribution would typically include the following components:

- summary and investment conclusion;
- industry overview and competitive analysis;
- financial statement model, potentially with several scenarios;
- valuation; and
- investment risks.

The contents of reports may also be specified by regulatory agencies or professional standards. For example, the CFA Institute *Standards of Practice Handbook (Handbook)* dictates standards that must be followed in communicating recommendations. According to the *Handbook*:

Standard V(B) states that members and candidates should communicate in a recommendation the factors that were instrumental in making the investment recommendation. A critical part of this requirement is to