



FINANCIAL STATEMENT ANALYSIS

CFA[®] Program Curriculum
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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

distinguish clearly between opinions and facts. In preparing a research report, the member or candidate must present the basic characteristics of the security(ies) being analyzed, which will allow the reader to evaluate the report and incorporate information the reader deems relevant to his or her investment decision making process.¹

The *Handbook* requires that limitations to the analysis and any risks inherent to the investment be disclosed. Furthermore, it requires that any report include elements important to the analysis and conclusions so that readers can evaluate the conclusions themselves.

Follow-Up

The process does not end with the report. If an equity investment is made or a credit rating is assigned, periodic review is required to revise forecasts and recommendations based on the receipt of new information. In the case of a rejected investment, subsequent analyses may still be required should the security price or business conditions change. Follow-up may involve repeating all the previous steps in the process on a periodic basis.

SCOPE OF FINANCIAL STATEMENT ANALYSIS

3

- describe the roles of financial statement analysis

The role of financial statement analysis is to use financial reports prepared by companies, combined with other information, to evaluate the past, current, and potential performance and financial position of a company for the purpose of making investment, credit, and other economic decisions. Managers within a company perform financial analysis to make operating, investing, and financing decisions but do not exclusively rely on analysis of related financial statements because they have access to nonpublic financial information.

In evaluating financial reports, analysts typically have a specific economic decision in mind. Examples of these decisions include the following:

- Evaluating an equity investment for inclusion in a portfolio.
- Valuing a security for making an investment recommendation to others.
- Determining the creditworthiness of a company to decide whether to extend a loan to the company and if so, what terms to offer.
- Assigning a debt rating to a company or bond issue.
- Deciding whether to make a venture capital or other private equity investment.
- Evaluating a merger or acquisition candidate.

These decisions demonstrate certain themes in financial analysis. In general, analysts seek to examine the past and current performance and financial position of a company to form expectations about its future performance and financial position. Analysts are also concerned about factors that affect the risks to a company's future performance and financial position. An examination of performance can include an

¹ *Standards of Practice Handbook*, 11th ed. (Charlottesville, VA: CFA Institute, 2014), p. 169.

assessment of a company's profitability (the ability to earn a profit from delivering goods and services) and its ability to generate positive cash flows (cash receipts in excess of cash disbursements).

Exhibit 2 shows how news coverage of corporate earnings announcements places corporate results in the context of analysts' expectations. Panel A shows the earnings announcement, and Panel B shows a sample of the news coverage of the announcement. Earnings are also frequently used by analysts in valuation. For example, an analyst may value shares of a company by comparing its price-to-earnings ratio (P/E) to the P/Es of peer companies or may use forecasted future earnings as direct or indirect inputs into discounted cash flow models of valuation.

Exhibit 2: An Earnings Release and News Media Comparison with Analysts' Expectations

Panel A: Excerpt from Sea Limited's Earnings Release

Singapore, August 16, 2022 – Sea Limited (NYSE: SE) (“Sea” or the “Company”) today announced its financial results for the second quarter ended June 30, 2022.

“As we navigate the current environment of increased macro uncertainty with that same nimble and decisive approach, we believe it is vital to be thoughtful, prudent, and disciplined. While we have strong resources and are well on-track to achieve our self-sufficiency targets, we are nevertheless rapidly prioritizing profitability and cash flow management. We are confident that this focus, combined with our demonstrated ability to execute, our scale and leadership, and our proven business models, will position us for long-term sustained success.”

Second Quarter 2022 Highlights:

- Total GAAP revenue was US\$2.9 billion, up 29.0% year-on-year.
- Total gross profit was US\$1.1 billion, up 17.1% year-on-year.
- Total net income (loss) was US\$(931.2) million compared to US\$(433.7) million for the second quarter of 2021. Total net loss excluding share-based compensation and impairment of goodwill was US\$(569.8) million compared to US\$(321.2) million for the second quarter of 2021.
- Total adjusted EBITDA was US\$(506.3) million compared to US\$(24.1) million for the second quarter of 2021.
- E-commerce Segment:
 - GAAP revenue was US\$1.7 billion, up 51.4% year-on-year. Based on constant currency assumptions, GAAP revenue was up 56.2% year-on-year.
 - Gross orders totaled 2.0 billion, an increase of 41.6% year-on-year.
 - Gross profit margin for e-commerce continued to improve sequentially quarter-on-quarter, as we have seen faster growth of transaction-based fees and advertising income, which have higher profit margin compared to product revenue and revenue generated from other value-added services.

E-commerce Full Year 2022 Guidance Update:

In our efforts to adapt to increasing macro uncertainties, we are proactively shifting our strategies to further focus on efficiency and optimization for the long-term strength and profitability of the e-commerce business. Given this

strategic shift, we will be suspending e-commerce GAAP revenue guidance for the full year 2022. We believe such efforts will further strengthen our ability to better capture the long-term growth opportunities in our markets, which we remain highly positive about.

Source: Sea Limited, "Sea Limited Reports Second Quarter 2022 Results," accessed 16 August 2022, <https://cdn.sea.com/webmain/static/resource/seagroup/website/investornews/2Q2022/uxxGiCr8oTGxOFTPhBUB/2022.08.16%20Sea%20Second%20Quarter%202022%20Results.pdf>.

Panel B: Excerpt from News Article: Sea Limited Reports Mixed Results, Suspends Revenue Guidance

Singapore-based Sea Limited (SE) reported second-quarter results early Tuesday that missed on revenue but beat on earnings. The company, however, said it will suspend guidance for its e-commerce unit, which accounts for about 60% of company revenue.

The company reported revenue of \$2.9 billion, missing estimates of \$2.98 billion. It lost 61 cents a share, better than the estimated loss of \$1.14 a share, according to FactSet.

SE stock plunged 14.3% during afternoon action on the stock market today.

Sea has one of the largest e-commerce and digital entertainment platforms in the Southeast Asia region. It also provides financial services.

The company said its decision to suspend revenue guidance was driven by a highly volatile and unpredictable macro environment.

"We think the right thing to do in this time of continuing heightened macro volatility is to prioritize efficiency and self-sufficiency," Chief Executive Forrest Li said in written remarks in the Sea Limited earnings report.

Sea's gaming unit, called Garena, accounts for about 31% of revenue.

"We are in an environment of increased macro uncertainty, with rising inflation, rising interest rates, local currency depreciations against the U.S. dollar, and ongoing reopening trends," said Li. "In this environment, being agile and adaptable is even more crucial to the long-term success of our business."

SE stock is down about 62% this year.

Source: Brian Deagon, "Sea Limited Reports Mixed Results, Suspends Revenue Guidance," 16 August 2022, <https://www.investors.com/news/technology/se-stock-drops-on-second-quarter-results-earnings/>.

Analysts are also interested in the financial position of a company, particularly for credit analysis, as depicted in Exhibit 3. Panel A of the exhibit is an excerpt from an August 2022 T-Mobile's press release highlighting a series of credit rating upgrades that the company received from the three major rating agencies. Panel B of the exhibit is an excerpt from a July 2022 announcement from Moody's Investor Service about its upgrade of T-Mobile's credit rating.

Exhibit 3: Credit Rating Upgrade for T-Mobile

Panel A: Excerpt from Announcement by T Mobile

T-Mobile Secures First-Ever Full Investment Grade Rating

BELLEVUE, Wash.--(BUSINESS WIRE)-- T-Mobile US, Inc. (NASDAQ: TMUS) today announced that following an investment grade issuer rating from S&P Global Ratings (S&P) – the third it has received from credit rating agencies – the company now has its first-ever full investment grade rating. S&P has

assigned the Company a BBB- with positive outlook. This follows the company securing a Baa3 rating with a stable outlook from Moody's and a BBB- rating with a positive outlook from Fitch.

This full investment grade rating comes as a result of T-Mobile's successful operational and financial performance, which is consistently demonstrated through strong subscriber growth and the company's ability to translate that into increasing free cash flow.

"Achieving a full investment grade rating is an important milestone for T-Mobile that reflects the leading credit rating agencies' positive outlook on our Un-carrier leadership strategy that is rooted in an unwavering focus on putting customers first," said Peter Osvaldik, T-Mobile chief financial officer. "This 'clean sweep' in upgrades provides T-Mobile with the ability to unlock full access to the deep investment grade debt markets, which will further fuel our growth and momentum toward our mission of being the very best at connecting customers to their world."

Source: "T-Mobile Secures First-Ever Full Investment Grade Rating," 5 August 2022, <https://investor.t-mobile.com/events-and-presentations/news/news-details/2022/T-Mobile-Secures-First-Ever-Full-Investment-Grade-Rating/default.aspx>.

Panel B: Excerpt from Moody's Announcement About Rating Action on T-Mobile

Rating Action: Moody's upgrades T-Mobile to Baa3; outlook stable

New York, July 20, 2022 -- Moody's Investors Service (Moody's) upgraded T-Mobile USA, Inc.'s (T-Mobile) senior unsecured debt rating to Baa3 from Ba2 and affirmed the Baa3 rating on the company's existing senior secured notes and senior secured revolving credit facility.

Moody's has also withdrawn T-Mobile's Ba1 corporate family rating, Ba1-PD probability of default rating and SGL-1 speculative grade liquidity rating. With this rating action, Moody's changed T-Mobile's ratings outlook to stable from positive.

The ratings upgrade reflects T-Mobile's accelerated achievement of higher than expected operating cost synergies following its April 2020 merger with Sprint, significant and nearly complete network and operations integration and high visibility into the company's steady path towards sustained debt leverage (Moody's adjusted) below 3.75x. T-Mobile's sizable operating scale, high speed 5G coverage footprint, substantial upside growth potential in historically under-indexed rural and enterprise end market segments, solid incremental revenue growth adjacencies in fixed wireless access, extensive asset base and solid industry market position support continued subscriber growth, EBITDA margin expansion and ramping free cash flow over the next 12-18 months. The company's financial policy, which prudently focuses on network infrastructure investments to support market share growth, remains an important driver of the credit profile going forward. Moody's views network investments, including spectrum investments, as supportive of the business profile.

The stable outlook reflects Moody's expectation for T-Mobile's continued subscriber and service revenue growth, EBITDA margin expansion, debt leverage (Moody's adjusted) declining steadily towards and sustained around 3.75x and rising free cash flow.

Source: "Moody's Upgrades T-Mobile to Baa3; Outlook Stable," 20 July 2022, https://www.moody's.com/research/Moodys-upgrades-T-Mobile-to-Baa3-outlook-stable--PR_468077.

In conducting financial analysis of a company, the analyst will regularly refer to the company's financial statements, financial notes, and supplementary schedules as well as a variety of other information sources. The next lesson introduces commonly used information sources.

REGULATED SOURCES OF INFORMATION

4

- describe the importance of regulatory filings, financial statement notes and supplementary information, management's commentary, and audit reports

Regulatory authorities require publicly traded issuers to prepare financial reports in accordance with specified accounting standards and other securities laws and regulations. For example, in Switzerland, Swiss-based companies listed on the main board of the Swiss Exchange must prepare their financial statements in accordance with either IFRS (International Financial Reporting Standards) or US GAAP (Generally Accepted Accounting Principles) if they are multinational.² While jurisdictions differ in their approach to securities regulations and corporate reporting standards, regulators of jurisdictions that oversee more than 95 percent of world's financial markets are members of the International Organization of Securities Commissions (IOSCO) and share objectives and principles, thereby creating a degree of global uniformity.

International Organization of Securities Commissions

Although technically not a regulatory authority, IOSCO regulates a significant portion of the world's financial capital markets. This organization was formed in 1983 and consists of ordinary members, associate members, and affiliate members. Ordinary members are the securities commission or similar governmental regulatory authority with primary responsibility for securities regulation in the member country.³ The members regulate more than 95 percent of the world's financial capital markets in more than 115 jurisdictions, and securities regulators in emerging markets account for 75 percent of its ordinary membership.

IOSCO's comprehensive set of *Objectives and Principles of Securities Regulation* is updated as required and is recognized as an international benchmark for all markets. The principles of securities regulation are based upon three core objectives:⁴

- protecting investors;
- ensuring that markets are fair, efficient, and transparent; and
- reducing systemic risk.

² "Financial Reporting Framework in Switzerland," Deloitte, <https://www.iasplus.com/en/jurisdictions/europe/switzerland>.

³ Examples include the China Securities Regulatory Commission, Egyptian Financial Supervisory Authority, Securities and Exchange Board of India, Kingdom of Saudi Arabia Capital Market Authority, and Banco Central del Uruguay.

⁴ *Objectives and Principles of Securities Regulation*, IOSCO, May 2017.

IOSCO's principles are grouped into 10 categories, including principles for regulators, for enforcement, for auditing, and for issuers, among others. Within the category "Principles for Issuers," two principles relate directly to financial reporting:

- There should be full, accurate, and timely disclosure of financial results, risk, and other information that is material to investors' decisions.
- Accounting standards used by issuers to prepare financial statements should be of a high and internationally acceptable quality.

Historically, regulation and related financial reporting standards were developed within individual countries and were often based on the cultural, economic, and political norms of each country. As financial markets have become more global, it has become desirable to establish comparable financial reporting standards internationally. Ultimately, laws and regulations are established by individual jurisdictions, so this also requires cooperation among regulators. Another IOSCO principle deals with the use of self-regulatory organizations (SROs), which exercise some direct oversight for their areas of competence and should be subject to the oversight of the relevant regulator and observe fairness and confidentiality.⁵

To ensure consistent application of international financial standards (such as the Basel Committee on Banking Supervision's standards and IFRS), it is important to have uniform regulation and enforcement across national boundaries. IOSCO assists in attaining this goal of uniform regulation as well as cross-border cooperation in combating violations of securities and derivatives laws.

US Securities and Exchange Commission

The US SEC has primary responsibility for securities and capital markets regulation in the United States and is an ordinary member of IOSCO. Any company issuing securities within the United States (e.g., on the New York Stock Exchange or NASDAQ), or otherwise involved in US capital markets, is subject to the rules and regulations of the SEC. The SEC, one of the oldest and most developed regulatory authorities, was created by reforms after the stock market crash of 1929 that preceded the Great Depression.

From a financial reporting and analysis perspective, the most significant statutes enforced by the SEC are the Securities Acts of 1933 and 1934 and the Sarbanes–Oxley Act of 2002.

- **Securities Act of 1933** (the 1933 Act): This law specifies the financial and other significant information that investors must receive when securities are sold, prohibits misrepresentations, and requires initial registration of all public issuances of securities.
- **Securities Exchange Act of 1934** (the 1934 Act): This law created the SEC, gave the SEC authority over all aspects of the securities industry, and empowered the SEC to require periodic reporting by companies with publicly traded securities.
- **Sarbanes–Oxley Act of 2002**: This law created the Public Company Accounting Oversight Board (PCAOB) to oversee auditors. The SEC is responsible for carrying out the requirements of the act and overseeing the PCAOB. The act addresses auditor independence (it prohibits auditors from providing certain non-audit services to the companies they audit); strengthens corporate responsibility for financial reports (it requires executive management to certify that the company's financial reports fairly present the company's condition); and requires management to report on

⁵ *Objectives and Principles of Securities Regulation*, IOSCO, May 2017.

the effectiveness of the company's internal control over financial reporting (including obtaining external auditor confirmation of the effectiveness of internal control).

Companies comply with these acts principally through filing standardized forms created by the SEC and by responding to and complying with specific comments on their filings by the SEC staff. More than 50 different types of SEC forms are used to satisfy reporting requirements; the discussion herein is limited to those forms most relevant for financial analysts.

Most of the SEC filings are required to be made electronically, so filings that an analyst would be interested in can be retrieved online from one of many websites, including an issuer's investor relations website and the SEC's own website. Some filings are required on the initial offering of securities, whereas others are required on a periodic basis thereafter. The following are some of the more common filings used by analysts.

- **Securities Offerings Registration Statement:** The 1933 Act requires companies offering securities to file a registration statement. New issuers as well as previously registered companies that are issuing new securities are required to file these statements. Required information and the precise form vary depending upon the size and nature of the offering. Typically, required information includes (1) disclosures about the securities being offered for sale, (2) the relationship of these new securities to the issuer's other capital securities, (3) the information typically provided in the annual filings, (4) recent audited financial statements, and (5) risk factors involved in the business. Interim unaudited financial statements are also provided if the statement is filed three months or more after a fiscal year end.
- **Forms 10-K, 20-F, and 40-F:** Companies are required to file these forms *annually*. Form 10-K is for US registrants, Form 40-F is for certain Canadian registrants, and Form 20-F is for all other non-US registrants. These forms require a comprehensive overview, including information concerning a company's business, risk factors, financial disclosures, legal proceedings, and information related to management. The financial disclosures include audited financial statements and notes, management discussion and analysis (MD&A) of the company's financial condition and results of operations, and auditors' reports.
- **Annual Report:** In addition to the SEC's annual filings (e.g., Form 10-K), most companies prepare an annual report to shareholders. This is not a requirement of the SEC. The annual report is usually viewed as one of the most significant opportunities for a company to present itself to shareholders and other external parties; accordingly, it is often a highly polished marketing document with photographs, an opening letter from the chief executive officer, financial data, market segment information, research and development activities, and future corporate goals. In contrast, the Form 10-K is a more legal type of document with minimal marketing emphasis. Although the perspectives vary, a company's annual report and its Form 10-K have considerable overlap. Some companies prepare only Form 10-K or publish an annual report that consists of a few pages of material and a copy of the 10-K.
- **Proxy Statement/Form DEF-14A:** The SEC requires that shareholders of a company receive a proxy statement before a shareholder meeting. A proxy is an authorization from the shareholder giving another party the right to cast its vote. Shareholder meetings are held at least once a year, but any special meetings also require a proxy statement. Proxies, especially annual meeting

proxies, contain information that is often useful to financial analysts. Such information typically includes proposals that require a shareholder vote, details of security ownership by management and principal owners, biographical information on directors, and disclosure of executive compensation. Proxy statement information is filed with the SEC as Form DEF-14A.

- **Forms 10-Q and 6-K:** Companies are required to submit these forms for interim periods (quarterly for US companies on Form 10-Q, and semiannually for many non-US companies on Form 6-K). The filing requires certain financial information, including unaudited financial statements and an MD&A for the interim period covered by the report. Additionally, if certain types of non-recurring events—such as the adoption of a significant accounting policy, commencement of significant litigation, or a material limitation on the rights of any holders of any class of registered securities—take place during the period covered by the report, these events must be included in the Form 10-Q report. Companies may provide the 10-Q report to shareholders or may prepare a separate, abbreviated, quarterly report to shareholders.

KNOWLEDGE CHECK



1. In September 2017, Sea Ltd, the Singapore-based technology company, filed a registration statement with the US SEC to register its initial public offering of securities (American Depositary Shares, each representing one Class A Ordinary Share) on the New York Stock Exchange. In addition to a large amount of financial information, the registration statement provided over 50 pages of discussion on Sea Ltd.'s business and industry.

Which of the following is *most likely* to have been included in Sea's registration statement?

- A. Underwriters' fairness opinion of the offering
- B. Assessment of risk factors involved in the business
- C. Projected cash flows and earnings for the business

Solution:

B is correct. Information provided by companies in registration statements typically includes disclosures about the securities being offered for sale; the relationship of these new securities to the issuer's other capital securities; the information typically provided in the annual filings; recent audited financial statements; and risk factors involved in the business. Companies provide information useful in developing projected cash flows and earnings but do not typically include these in the registration statement, nor do they provide opinions of the underwriters.

A company or its officers make other SEC filings—either periodically, or, if significant events or transactions have occurred, in between the periodic reports noted previously. By their nature, these forms sometimes contain timely information that may have significant valuation implications.

- **Form 8-K:** In addition to filing annual and interim reports, SEC registrants must report material corporate events on a more current basis. Form 8-K (6-K for non-US registrants) is the “current report” companies must file with the SEC to announce such major events as acquisitions or disposals of

corporate assets, changes in securities and trading markets, matters related to accountants and financial statements, corporate governance and management changes, and Regulation FD disclosures.⁶

- **Forms 3, 4, 5, and 144:** Forms 3, 4, and 5 are required to report beneficial ownership of securities. These filings are required for any director or officer of a registered company as well as beneficial owners of greater than 10 percent of a class of registered equity securities. Form 3 is the initial statement, Form 4 reports changes, and Form 5 is the annual report. Form 144 is notice of the proposed sale of restricted securities or securities held by an affiliate of the issuer. These forms can be used to examine purchases and sales of securities by officers, directors, and other affiliates of the company, who collectively are regarded as corporate insiders.
- **Form 11-K:** This is the annual report of employee stock purchase, savings, and similar plans. It might be of interest to analysts for companies with significant employee benefit plans because it contains more information about these plans than disclosed in the company's financial statements.

In jurisdictions other than the United States, similar legislation exists for the purpose of regulating securities and capital markets. Regulatory authorities are responsible for enforcing regulation, and securities regulation is intended to be consistent with the IOSCO objectives described in the previous section. Within each jurisdiction, regulators will either establish or, more typically, recognize and adopt a specified set or sets of accounting standards. The regulators will also establish reporting and filing requirements. IOSCO members have agreed to cooperate in the development, implementation, and enforcement of internationally recognized and consistent standards of regulation.

Capital Markets Regulation in Europe

Each individual member state of the European Union (EU) regulates capital markets in its jurisdiction. Certain regulations, however, have been adopted at the EU level. Importantly, the EU agreed that from 2005 consolidated accounts of EU-listed companies would use International Financial Reporting Standards. The endorsement process by which newly issued IFRS are adopted by the EU reflects the balance between the individual member state's autonomy and the need for cooperation and convergence. When the IASB issues a new standard, the European Financial Reporting Advisory Group advises the European Commission on the standard, and the Standards Advice Review Group provides the Commission with an opinion about that advice. Based on the input from these two entities, the Commission prepares a draft endorsement regulation. The Accounting Regulatory Committee votes on the proposal; and if the vote is favorable, the proposal proceeds to the European Parliament and the Council of the European Union for approval.⁷

Two bodies related to securities regulation established by the European Commission are the European Securities Committee (ESC) and the European Securities and Market Authority (ESMA). The ESC consists of high-level representatives of member states and advises the European Commission on securities policy issues. ESMA is an EU cross-border supervisor established to coordinate supervision of the EU market. As noted earlier, regulation still rests with the individual member states and, therefore,

⁶ Regulation Fair Disclosure (FD) provides that when an issuer discloses material non-public information to certain individuals or entities—generally, securities market professionals such as stock analysts or holders of the issuer's securities who may trade on the basis of the information—the issuer must make public disclosure of that information. In this way, the rule aims to promote full and fair disclosure.

⁷ European Commission, [https://www.esma.europa.eu/convergence/ias-regulation#:~:text=The%20objective%20of%20the%20International,the%20European%20Union%20\(EU\).](https://www.esma.europa.eu/convergence/ias-regulation#:~:text=The%20objective%20of%20the%20International,the%20European%20Union%20(EU).)

requirements for registering shares and filing periodic financial reports vary from country to country. ESMA is one of three European supervisory authorities; the two others supervise the banking and insurance industries.

Financial Notes and Supplementary Schedules

The notes (also sometimes referred to as footnotes) that accompany the financial statements are required and often account for a large percentage of the financial disclosures made in regulatory filings. The notes provide information that is essential to understanding the information provided in the statements. Sea Ltd.'s 2021 financial statements, for example, include more than 60 pages of notes.

The notes disclose the basis of preparation for the financial statements. For example, Sea Ltd. discloses that its fiscal year corresponds to the calendar year; its financial statements are prepared in accordance with US GAAP; the statements are thousands of US dollars unless otherwise specified; and the figures have been rounded, which might give rise to minor discrepancies when they are added. Sea Ltd. also states that its financial statements are on a consolidated basis—that is, aggregating the financial records of all its subsidiaries it controls, after eliminating intercompany balances and transactions.

The notes also disclose information about the accounting policies, methods, and estimates used to prepare the financial statements. Both IFRS and US GAAP allow some flexibility in choosing among alternative policies and methods when accounting for certain items. This flexibility aims to meet the divergent needs of many businesses for reporting a variety of economic transactions. In addition to differences in accounting policies and methods, differences arise as a result of estimates needed to record and measure transactions, events, and financial statement line items.

Overall, flexibility in accounting choices is necessary because, ideally, a company will select those policies, methods, and estimates that are allowable and most relevant and that fairly reflect the unique economic environment of the company's business and industry. Flexibility can, however, create challenges for the analyst because the use of different policies, methods, and estimates reduces comparability across different companies' financial statements.

For example, if a company acquires a piece of equipment to use in its operations, accounting standards require that the cost of the equipment be reported as an expense (depreciation) by allocating its cost, less any residual value, in a systematic manner over the equipment's useful life. Accounting standards permit flexibility, however, in determining the way each year's expense is determined. Two companies may acquire similar equipment but use different methods and assumptions to record the expense over time. An analyst's ability to compare the companies' performance is hindered by the difference. Analysts must understand reporting choices to make appropriate adjustments when comparing companies' financial positions and performance.

For many companies, the financial notes and supplemental schedules provide explanatory information about every line item (or almost every line item) on the balance sheet and income statement. In addition, note disclosures include information about the following (this is not an exhaustive list):

- segment reporting;
- business acquisitions and disposals;
- contractual obligations, including both on- and off-balance sheet debt;
- financial instruments and risks arising from financial instruments;
- legal proceedings;
- related-party transactions; and
- subsequent events (i.e., events that occur after the balance sheet date).