

## **Learning Module 1: Introduction to Financial Statement Analysis**

### **LOS 1a: describe the steps in the financial statement analysis framework**

Financial analysis is the process of interpreting and evaluating a company's performance and position in the context of its economic environment. Analysts use financial analysis to make investment decisions and recommendations.

As a generic term, the financial statement analysis framework describes the process of assessing financial statements, supplemental information, and other sources of information. Essentially, the financial statement analysis framework helps analysts draw conclusions and make informed recommendations, such as whether to invest in a company or extend a loan.

## **Steps Involved in the Financial Statement Analysis Framework**

The financial statement analysis framework involves six steps. These include:

### **Step 1: Articulate the Purpose and Context of the Analysis**

This step guides further decisions about the approach, tools, data sources, and final report format. It also defines the target audience, end product, and timeframe. Further, it identifies the requisite resources and resource constraints. After this, the analyst should be able to compile the specific questions to be answered by the analysis.

The output from this step includes:

- Timetable and proposed budget
- Nature and content of the expected report
- A list of written or unwritten questions to be answered
- The stated objective of the analysis

### **Step 2: Collect Data**

The analyst gathers the necessary data to answer the specific questions compiled in Step 1. The sources of information at this stage include:

- Financial statements, other financial data, questionnaires, and industry or economic data
- Company site visits
- Discussions with issuer investor relations, management, suppliers, customers, competitors, and company or industry experts.

At this step, the analysts should be able to produce output such as completed questionnaires where applicable and financial statements and other quantitative data, structures in a consumable form.

### **Step 3: Process Data**

The analyst processes the data collected in step 2 using various analysis tools. This may involve computing financial ratios and growth rates, creating charts, preparing common-size financial statements, or performing statistical analyses such as regression analysis.

### **Step 4: Analyze and Interpret the Data**

The analyst assesses the data processed in step 3. The analyst should be able to interpret the output of the analysis and use it to support a conclusion or recommendation. The results from this step include analytical results, forecasts, and valuations.

### **Step 5: Develop and communicate conclusions and recommendations:**

The analyst should communicate the conclusion and recommendations derived from the analysis in an appropriate format that answers the questions posed in Step 1. The analyst uses analytical results and previous reports based on institutional guidelines to answer the questions posed in Step 1.

The format of communicating conclusions or recommendations depends on the analytical objectives, institution, audience, and requirements of the regulatory agencies or professional standards.

## **Step 6: Follow-up**

The analyst should perform periodic reviews to determine if the initial conclusions and recommendations still hold. This may require a periodic repeat of all the previous steps.

## Question

In which step of the financial statement analysis framework would performing sensitivity analysis *most likely* be involved?

- A. Follow-up.
- B. Processing data.
- C. Collecting input data.

## Solution

The correct answer is **B**.

In the financial statement analysis framework, performing sensitivity analysis is most appropriately categorized under the step of "Processing Data." Sensitivity analysis is a technique used to assess the impact of changes in input variables on the outcome of a financial model. It involves varying key assumptions or parameters within the model to evaluate how these changes affect the results. This process is a part of data processing, as it involves manipulating and analyzing the collected data to gain deeper insights into the financial performance and risks associated with a company.

**A is incorrect.** "Follow-up" is concerned with reviewing the conclusions and recommendations of the analysis over time to ensure their continued validity. It does not involve the actual processing or analysis of data.

**C is incorrect.** "Collecting input data" involves gathering the necessary financial statements, economic data, and other relevant information required for the analysis. It precedes the processing of data and does not encompass the analytical techniques such as sensitivity analysis that are applied to the collected data.

## **LOS 1b: describe the roles of financial statement analysis**

In financial statement analysis, analysts evaluate a company's financial reports, along with related information like financial notes and supplementary schedules. This assessment is crucial in evaluating the past, current, and potential performance and financial position of a company in order to make investment, credit, and other economic decisions.

- Valuating company securities.
- Debt rating
- Analyzing a potential merger or acquisition candidate
- Evaluating the Creditworthiness of a company

Generally, analysts aim to assess a company's current and past performance and financial position. Consequently, they can leverage these findings to shape future expectations regarding the company's financial position and performance, as well as factors impacting the risk profile of the company.

For instance, performance analysis can be used to determine if a company is profitable, adequately capitalized, able to meet its long and short-term obligations, and able to generate positive cash flows continuously.

## Question

Which of the following *best* describes the role of financial statement analysis?

- A. To determine whether a company should close its operations.
- B. To provide information on a company's financial performance and position.
- C. To use a company's financial reports to evaluate its past, future, and potential performance.

## Solution

The correct answer is **C**.

In financial statement analysis, a company's financial reports are used to evaluate its past, future, and potential performance.

**A is incorrect** because financial statement analysis does not only provide information on whether a business should close its operations, but also how profitable it is, its financial ratios, etc.

**B is incorrect** because it describes the role of financial reporting and not financial statement analysis.

**LOS 1c: describe the importance of regulatory filings, financial statement notes and supplementary information, management's commentary, and audit reports.**

## **Regulatory Authorities**

Publicly traded issuers must prepare financial reports per specific securities laws and regulations and accounting standards as prescribed by regulatory authorities. Corporate reporting standards and securities regulations may differ in different jurisdictions. For this reason, the International Organization of Securities Commissions (IOSCO's) member jurisdictions oversee more than 95 percent of the world's financial markets, enabling global uniformity and promoting financial markets.

### **International Organization of Securities Commissions**

The IOSCO was founded in 1983 and consists of affiliates, associates, and ordinary members. As mentioned, the IOSCO is technically not a regulatory authority but regulates more than 95 percent of the global financial capital markets. The International Organization of Securities Commission (IOSCO) consists of ordinary members, associate members, and affiliate members.

Specifically, the ordinary members are the securities commission tasked with securities regulations in the member countries. Some examples of ordinary members include the China Securities Regulatory Commission, the US Securities and Exchange Commission, the Egyptian Financial Supervisory Authority, the Securities and the Kingdom of Saudi Arabia Capital Market Authority. The ordinary member regulates 95 percent of the global financial capital markets in more than 115 countries.

IOSCO contains clearly defined Objectives and Principles of Securities Regulation, which are appropriately updated and act as the international benchmark for all markets. The securities regulation principles are based on three core objectives:

- Systemic risk reduction.

- Investor protection.
- Ensuring a fair, efficient, and transparent markets.

There are ten categories of IOSCO's principles, consisting of principles for regulators, for enforcement, for market integrity and efficiency, for collective investment schemes, for issuers, and others.

Regarding the principle for issuers, it is a category that contains two principles that are of interest in this topic and related to financial reporting:

1. Investors should have access to complete, accurate, and timely disclosures of financial results, risk, and other relevant information.
2. The quality of accounting standards issuers use to prepare financial statements should be high and internationally accepted.

Another IOSCO principle pertains to self-regulatory organizations (SROs), which directly oversee their competence areas. These organizations should be subject to oversight by the relevant regulator and adhere to principles of fairness and confidentiality.

## **US Securities and Exchange Commission**

As an ordinary member of IOSCO, the US SEC oversees US securities markets and securities. The Securities and Exchange Commission was established in response to reforms after the 1929 stock market crash preceding the Great Depression.

Key statutes enforced by the SEC, such as the Securities Acts of 1933 and 1934 and the 2002 Sarbanes-Oxley Act, play a crucial role in financial reporting and analysis.

The 1933 Securities Act mandates the disclosure of financial and other essential information to investors during the sale of securities, forbids false statements, and necessitates the initial registration of all public securities offerings.

The 1934 Securities Exchange Act established the Securities and Exchange Commission (SEC), granted the SEC regulatory authority over the entire securities industry, and authorized the SEC

to mandate regular reporting from companies with publicly traded securities.

The 2002 Sarbanes-Oxley Act established the Public Company Accounting Oversight Board (PCAOB) to supervise auditors. The SEC implements the act's provisions and oversees the PCAOB. The act focuses on auditor independence by restricting auditors from providing specific non-audit services to their audit clients, enhances corporate accountability for financial reporting by requiring top management to affirm that the company's financial statements accurately represent its financial condition, and mandates management to evaluate and report on the effectiveness of the company's internal controls over financial reporting, including obtaining external auditor verification of the effectiveness of internal controls.

SEC regulations are primarily enforced by filing standardized forms and responding to SEC staff comments on company filings. Since SEC filings are typically made electronically, analysts can access filings online, such as those on an issuer's investor relations website or the SEC's website. The following are some filings commonly used by analysts:

- **Securities Offering Registration Statement:** Companies offering securities must file a registration statement. Previously registered companies and new issuers issuing new securities must file these statements. The specific form and information required vary by size and nature.
- **Forms 10-K, 20-F, and 40-F:** These forms have to be filed annually. US registrants file Form 10-K, some Canadian registrants file Form 40-F, and all other registrants file Form 20-F. Information on these forms must include the company's business, risks, financial disclosures, legal proceedings, and management.
- **Annual Report:** Annual reports are usually prepared by companies. The SEC does not require this. A company's annual report is one of the best ways to present itself to shareholders and other stakeholders.
- **Proxy Statement/Form DEF-14A:** Proxy voting involves a shareholder authorizing another party to vote on their behalf. Before a shareholder meeting, the SEC requires a proxy statement to be sent to shareholders.
- **Forms 10-Q and 6-K:** US companies must file these forms quarterly on Form 10-Q,

and non-US companies must file them semiannually on Form 6-K. The required information includes some financial information, such as unaudited financial statements and MD&A for the interim period covered by the report. Moreover, Form 10-Q should include certain non-recurring events, such as the start of significant litigation or adopting a new accounting policy.

Apart from the forms mentioned above, companies are required to make additional SEC filings if significant transactions or events have occurred between periodic filings. They include:

- **Form 8-K:** SEC registrants must report material and corporate events more frequently in addition to annual and interim reports. SEC Form 8-K (6-K for non-US registrants) is used to announce significant events and is referred to as the "current report."
- **Forms 3, 4,5, and 144:** Beneficial ownership of securities must be reported on Forms 3, 4, and 5. Those who own more than 10 percent of a class of registered equity securities, including directors and officers, are required to file these documents. Initial statements are on Form 3, changes are reported on Form 4, and annual reports are on Form 5. Form 144 is a notice of proposed sales of securities held by affiliates of the issuer and restricted securities. Analysts can use these forms to examine purchases and sales of securities to corporate insiders.
- **Form 11-K:** This is an annual stock purchase and savings report for employees. Those analysts interested in companies with significant employee benefit plans may find it helpful since it includes more information about these plans than disclosed by the company.

## **Capital Markets Regulation in Europe**

In the European Union (EU), capital markets are primarily regulated by individual member states. However, the EU has established specific overarching regulations. Notably, since 2005, the EU has mandated that consolidated financial statements of companies listed in the EU adhere to International Financial Reporting Standards (IFRS).

The process for endorsing new IFRS standards reflects a balance between the autonomy of

member states and the need for cooperation and convergence. When the International Accounting Standards Board (IASB) issues a new standard, the European Financial Reporting Advisory Group provides advice to the European Commission, which is then reviewed by the Standards Advice Review Group. Based on their input, the Commission drafts an endorsement regulation, which is voted on by the Accounting Regulatory Committee. If the vote is favorable, the proposal advances to the European Parliament and the Council of the European Union for final approval.

Securities regulation within the EU is overseen by two key bodies established by the European Commission: the European Securities Committee (ESC) and the European Securities and Markets Authority (ESMA).

The ESC, composed of high-level representatives from member states, advises the European Commission on securities policy issues. On the other hand, ESMA acts as a cross-border supervisor to coordinate the regulation of EU markets.

In conclusion, despite the presence of these EU-wide bodies, the responsibility for securities regulation largely remains with individual member states, leading to variations in requirements for share registration and periodic financial reporting across countries.

## **Financial Statement Notes and Supplementary schedules**

The financial statement notes, often referred to as footnotes, are a crucial component of regulatory filings, providing extensive disclosures that are essential for understanding the financial statements. The footnotes detail the basis of preparation, including the fiscal year alignment with the calendar year, the type of accounting standards, the types of currency, the rounding of figures, and whether the financial statements are consolidated (aggregate the financial records of all controlled subsidiaries after eliminating intercompany balances and transactions).

Furthermore, the notes disclose the accounting policies, methods, and estimates employed in preparing the financial statements. Both IFRS and US GAAP offer flexibility in choosing among alternative policies and methods for accounting for certain items, aiming to accommodate the

diverse needs of businesses in reporting various economic transactions. This flexibility, while necessary for companies to select the most relevant and fair policies, methods, and estimates for their unique economic environment, poses challenges for analysts due to reduced comparability across different companies' financial statements.

Additionally, notes disclosures include information on 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 (post balance sheet events).

Generally, for most companies, financial notes and supplemental schedules typically provide explanatory information for every line item (or almost every line item) on the balance sheet and income statement.

## **Business and Geographic Segment Reporting**

Most companies often consist of multiple businesses, and while IFRS and US GAAP do not mandate the provision of disaggregated full financial statements for all subsidiaries or businesses, they do require some disaggregated information in the financial statement notes by operating segment.

An operating segment is defined as a component of a company that:

- engages in activities that generate revenue and incur expenses, including start-up segments that have yet to earn revenues.
- its results are regularly reviewed by the company's senior management.
- has available discrete financial information.

A company must disclose separate information for any operating segment that meets specific quantitative criteria. Specifically, if the segment accounts for 10 percent or more of the combined operating segments' revenue, assets, or profit.

If the combined revenue from external customers for all reportable segments is less than 75

percent of the total company revenue, additional reportable segments must be identified until the 75 percent threshold is reached.

Small segments may be aggregated if they share a significant number of factors that define a business or geographical segment, or they may be combined with a similar significant reportable segment. Information about operating segments and businesses that are not reportable is aggregated in an "all other segments" category.

Companies are required to disclose the factors used to identify reportable segments and the types of products and services sold by each reportable segment. For each reportable segment, the following information should also be disclosed in the notes to the financial statements:

- Revenue, distinguishing between revenue to external customers and revenue from other segments.
- A measure of profit or loss.
- A measure of assets and liabilities (if the company's chief decision-making officer regularly reviews these amounts).
- Interest revenue and interest expense.
- Cost of property, plant, and equipment, and intangible assets acquired.
- Depreciation and amortization expense.
- Other non-cash expenses.
- Income tax expense or income.
- proportion of an investment's net profit or loss is accounted for under the equity method.

Companies must also prepare a reconciliation between the information of reportable segments and the consolidated financial statements based on segment revenue, profit or loss, assets, and liabilities.

## **Management Commentary**

The Management Discussion and Analysis (MD&A) section is critical to a public company's annual report. A management commentary or management discussion and analysis report (MD&A) is usually included in a public company's annual reports. It is referred to by various names, including management reports, management commentary, and operating and financial reviews.

While the information in the MD&A is crucial, it is typically unaudited, except in some countries like Germany, where management reporting has been mandated and audited since 1931.

It provides a platform for management to discuss various aspects of the company, including its business operations, risk management strategies, planned capital expenditures, and future outlook. The MD&A is a valuable tool for understanding the financial statements and offers insights into the company's potential future performance.

The MD&A is a useful starting point for understanding the financial statements and can also provide critical insights into a company's potential future performance.

## **Management Commentary and Regulations**

In regulatory filings such as Form 10-K and 10-Q in the United States, the MD&A section covers topics such as the nature of the business, past performance, and future prospects.

In the US, the Securities and Exchange Commission (SEC) mandates that publicly traded companies must supply a Management Discussion and Analysis (MD&A), which outlines the specifics of what this should include. It is incumbent upon the management to underscore any positive or negative trends and pinpoint crucial events and uncertainties that have an impact on the company's liquidity, capital resources, and operational outcomes.

The MD&A should also offer insights into the repercussions of inflation, price fluctuations, and other significant events and uncertainties that could lead to a substantial divergence between future operational results and financial status from the currently reported financial data. Furthermore, the MD&A should include details about obligations not recorded on the balance

sheet and about contractual commitments, such as obligations to make purchases.

Management is also expected to delve into the pivotal accounting policies that necessitate them to exercise subjective judgments and that exert a considerable influence on the financial results reported.

To enhance the quality of the MD&A, the International Accounting Standards Board (IASB) issued an IFRS Practice Statement titled "Management Commentary." This provides a framework for preparing and presenting management commentary, identifying five key content elements: the nature of the business, management's objectives and strategies, significant resources, risks and relationships, results of operations, and critical performance measures.

## **Auditor's Report**

Companies' annual reports typically include financial statements that must be audited by an independent accounting firm, following specific auditing standards. The auditor provides a written opinion, known as the audit report, which may vary across jurisdictions but generally includes a statement of the auditor's opinion. Financial statement audits are often mandated by contractual agreements, laws, or regulations.

## **Objectives of an Audit**

According to ISAs, the two primary objectives of an audit are:

- To provide reasonable (not absolute) assurance that financial statements are free from material misstatement. This, in essence, enables the independent auditor to express an opinion on whether or not the preparation of financial statements complied with a specified set of accounting standards.
- To report on the financial statements following the auditor's findings as required by the International Standards for Auditing.

## **Types of Audit Reports**

When an independent auditor provides a written opinion on a company's financial statements, it is called an audit report.

The standard independent audit report usually has several paragraphs. To begin with, the first or "introductory" paragraph describes the financial statements and the responsibilities of management and the auditor. The second or "scope" paragraph describes the nature of the audit process and gives the basis for the auditor's expression about reasonable assurance. The third paragraph, "opinion," gives the auditor's assessment of the financial statements' fairness.

The audit opinion can take any one of the following forms:

- The **unqualified audit opinion** indicates that the financial statements are fairly presented under accounting standards.
- The **qualified audit opinion** indicates some limitation to the audit's scope or an exception to the accounting standards.
- The **adverse audit opinion** indicates that the independent auditor has determined that the financial statements are not fairly presented and materially depart from accounting standards.
- The **disclaimer of opinion** indicates that the auditor cannot issue an audit opinion for one reason or another.

## Audit Standards and Practices

Audits are conducted under the International Standards on Auditing (ISAs), developed by the International Auditing and Assurance Standards Board (IAASB). These standards are widely adopted, although some countries, like the United States, have their own auditing standards. In the US, the Public Company Accounting Oversight Board (PCAOB) sets auditing standards for public companies following the Sarbanes-Oxley Act of 2002.

Audits are designed using sampling techniques and may involve estimates and assumptions. As a result, auditors provide reasonable, not absolute, assurance about the financial statements' accuracy. This means there is a high probability that the audited financial statements are free

from material error or fraud.

## **Key Audit Matters**

For listed companies, the audit report includes a discussion of Key Audit Matters (international) or Critical Audit Matters (United States).

Key Audit Matters refer to issues that the auditor considers to be most important, such as those that have a higher risk of misstatement, involve significant management judgment, or report the effects of significant transactions during the period.

Critical Audit Matters refer issues that involve "especially challenging, subjective, or complex auditor judgment" and similarly include areas with a higher risk of misstatement or that involve significant management judgment and estimates.

## Question

Information on a company's results of operations, planned capital expenditure, and future outlook is usually found in which of the following?

- A. Auditor's report.
- B. Management commentary.
- C. Notes to the financial statements.

## Solution

The correct answer is **B**.

In a management commentary, a company's management discusses matters of concern to the company, such as the results of its operations, risk strategies employed, planned capital expenditure, and future outlook.

**A and C are incorrect** because they typically do not report this information.

## **LOS 1d: describe implications for financial analysis of alternative financial reporting systems and the importance of monitoring developments in financial reporting standards**

The goal of global convergence has been advanced by adopting IFRS in many countries outside the US as the required financial reporting standard. However, several differences exist between US GAAP and IFRS that affect how companies report their financial statement. The following are the significant differences between US GAAP and IFRS.

Basis for Comparison	US GAAP	IFRS
Developed by	FASB	IASB
Basis	Rules	Principles
Inventory write-down reversal	Prohibited	Permissible if certain conditions are met
Valuation of inventory	LIFO, FIFO, and Weighted Average Method	Weighted Average Method and FIFO.
Development cost	Expensed	Capitalized if it meets the criteria for capitalization.
Interest paid	Cash flows from operating activities	Cash flows from operating or Cash flows from financing activities

Analysts comparing two companies that use different accounting standards must be aware of areas where accounting standards have not converged since reconciliation disclosures between IFRS and US GAAP are not required. It is often difficult to make the specific adjustments necessary to achieve comparability between financial statements prepared under different accounting standards without sufficient information.

Comparative financial measures generated under different accounting standards must be interpreted carefully by analysts, and significant developments in financial reporting standards need to be monitored, as these factors can affect company performance and security valuations in essential ways.

## **Monitoring Developments in Financial Reporting Standards**

Analysts should monitor developments in financial reporting standards from a user perspective, not a preparer's perspective (like accountants). They need to understand the effect of these developments on financial reports. Analysts can stay informed about developments in financial reporting standards by keeping tabs on actions of standard setters, new products and transactions, and company disclosures of critical estimates and accounting policies.

## New Types of Transactions or Products

There can be unusual or unique components to new products and types of transactions that are not explicitly outlined in the financial reporting standards. An economic event, such as a new business (e.g., fintech) or a new financial instrument, typically brings about new products or transactions. In addition to reviewing financial reports, analysts can monitor business journals and capital markets for new products and transactions.

When one company introduces something new, others in the industry tend to follow. To comprehend these novelties, it's crucial to understand their business purpose.

## Evolving Standards

The delays between new product development and regulatory action make standard setters and regulators unlikely to identify new products and transactions. Nevertheless, monitoring the actions of these authorities is essential because regulatory changes can impact companies' financial reports and hence valuations. Market participants may ignore financial statement details when valuing a company's securities. In this case, more explicit identification could affect company securities' value. Further, it appears that management pays more attention to and is more rigorous in calculating/estimating items that appear in the financial statements than those in the notes.

The FASB and IASB publish information on proposed future standard changes and new standards on their websites. The input of financial analysts, especially those who regularly use financial statements, is used by the FASB and IASB when creating or changing standards. CFA Institute

actively supports improvements to financial reporting. In addition to drafting comment letters and position papers, volunteer members of the CFA Institute serve on various liaison committees that meet regularly to recommend proposed standards to FASB and IASB.

## Question

Analysts are advised to monitor developments in financial reporting standards primarily from a:

- A. Preparer's perspective to ensure accurate implementation.
- B. Legal perspective to avoid regulatory discrepancies.
- C. User perspective to understand their impact on financial reports.

## Solution

**C is correct.** Analysts monitor the development of financial reporting standards from a user perspective.

**A and B are incorrect.** Accountants monitor developments in financial reporting standards from a preparer's perspective.

## **LOS 1e: describe information sources that analysts use in financial statement analysis besides annual and interim financial reports**

Analysts tend to base their financial statement analysis on the company's audited, annual financial statements to get a relatively accurate picture of its financial position and performance. In this case, the annual financial statements audit must have been done by an independent auditor. However, other important sources of information can be relied upon in this process to facilitate informed investment decision-making.

## **Information Sources Other Than Annual Financial Statements**

Other than supplementary and annual financial statement information, financial statement analysis can be conducted using the information provided by a company in its annual report or other publicly available documents such as proxy statements. These sources can be grouped by origin:

### **I. Issuer Sources**

- Earning calls: Issuers host earnings calls to discuss financial results via webcast or teleconference. Media, analysts, and investors are the primary audience for the calls. To sharpen their estimates, analysts ask probing questions to understand past actions and results.
- Presentations and events
- Press releases
- Speaking with other company personnel, investor relations, or management
- Company properties or websites analysts can visit as an investor or customers

### **II. Public Third-party Sources**

- Free analyst reports or industry whitepapers
- Industry or economic indicators from the governments

- General and industry-specific news outlets
- Social media

### **III. Proprietary Third-party Sources**

- Analyst communications and reports
- Data and reports from platforms such as FactSet
- Data and reports from industry-specific consultancies

### **IV. Proprietary Primary Research**

- Product comparisons, surveys, and conversations are conducted directly or commissioned by an analyst

Economic, industry, and peer company information helps put a company's financial performance and prospects in perspective. An analyst's effectiveness depends largely on information from sources outside the company.

## Question

Information sources for financial statement analysis can be categorized into different origins. Which of the following options represents an example of a “proprietary third-party source”?

- A. Earning calls hosted by the company.
- B. Data and reports from industry-specific consultancies.
- C. Conducting surveys and conversations commissioned by an analyst.

## Solution

The correct answer is **B**.

Data and reports from industry-specific consultancies is an example of proprietary third-party source.

**A is incorrect.** This is an issuer source of information.

**C is incorrect.** This is proprietary primary research.