Analyzing Financial Statements: Key Metrics and Methods

Guide to analyzing financial statements for financial analysts

Written by Tim Vipond
Reviewed by Jeff Schmidt

What is Financial Statement Analysis?

Financial statement analysis is the process of evaluating a company's financial health and performance by reviewing its financial statements, including the income statement, balance sheet, and cash flow statement.

Why is Analyzing Financial Statements Important?

Financial statement analysis offers a clear and comprehensive view of a company's financial health for both internal stakeholders, such as the finance team and business leaders, and external stakeholders, such as investors. This analysis helps stakeholders identify key insights into a company's performance. It also keeps finance professionals, and investors informed about business and market trends, enabling better decision-making.

In addition, evaluating key financial ratios such as profitability, liquidity, and solvency helps finance teams and business leaders assess resource management and progress toward financial goals. Investors also use ratio analysis to gauge a company's financial health and growth potential for informed investment decisions.

The benefits of performing financial statement analysis include:

1. **Informed Decision Making:** Financial statement analysis provides necessary insights to business leaders for making strategic decisions, such as expanding operations, investing in new projects, or cutting costs.
2. **Performance Evaluation:** Company leadership and investors can track the business's financial performance over time, identifying strengths and areas for improvement.
3. **Risk Management:** By understanding financial vulnerabilities, company leadership can take proactive steps to mitigate risks, such as cash flow issues or excessive debt.
4. **Investor Confidence:** Detailed financial analysis helps attract and retain investors by demonstrating transparency and the company's ability to generate returns.
5. **Regulatory Compliance:** Regular financial analysis and reporting ensures that businesses meet legal and regulatory requirements, reducing the risk of penalties, fines, or reputational damage.

One of the main tasks of a financial analyst is to analyze a company's financial statements, including the income statement, balance sheet, and cash flow statement.

The main goal of financial analysis is to measure a company's financial performance over time and against its peers.

Analysts use data from their financial statement analysis to build financial models that allow them to forecast metrics like revenue, expenses, and profitability.

How to Conduct a Financial Statement Analysis

One of the main tasks of an analyst is to perform an extensive analysis of financial statements. This free guide breaks down the most important types and techniques of financial statement analysis.

This guide is designed to be useful for both beginners and advanced finance professionals, with the main topics covering: (1) the income statement, (2) the balance sheet, (3) the cash flow statement, and (4) rates of return.

($ in millions)	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Revenue	51,585	53,494	55,749	100%	100%	100%	NA	4%	4%
COGS	27,697	28,429	29,200	54%	53%	52%	NA	3%	3%
Gross Profit	23,888	25,065	26,550	46%	47%	48%			
SG&A	5,877	6,006	6,144	11%	11%	11%	NA	2%	2%
Other	1,764	1,931	2,026	3%	4%	4%	NA	9%	5%
EBITDA	16,247	17,128	18,380	31%	32%	33%	NA	5%	7%
Depreciation	2,960	3,196	3,452	6%	6%	6%	NA	8%	8%
Earnings Before Interest and Taxes	13,287	13,932	14,928	26%	26%	27%	NA	5%	7%
Interest Expense	1,488	2,580	2,448	3%	5%	4%	NA	73%	(5%)
Earnings Before Tax	11,799	11,352	12,480	23%	21%	22%	NA	(4%)	10%
Tax	3,155	2,861	3,012	6%	5%	5%	NA	(9%)	5%
Net Income	8,644	8,491	9,468	17%	16%	17%	NA	(2%)	12%

Analysis of Financial Statements

1. Income Statement Analysis

have?" "Is it profitable?" and "What are the margins like?"

In order to answer these questions, and much more, we will dive into the income statement to get started.

There are two main types of analysis we will perform: vertical analysis and horizontal analysis.

Vertical Analysis

With vertical analysis, we will look up and down the income statement to see how every line item compares to revenue as a percentage.

For example, in the income statement shown below, we have the total dollar amounts and the percentages, which make up the vertical analysis.

($ in millions)	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Revenue	51,585	53,494	55,749	100.0%	100.0%	100.0%
COGS	27,697	28,429	29,200	53.7%	53.1%	52.4%
Gross Profit	23,888	25,065	26,550	46.3%	46.9%	47.6%
SG&A	5,877	6,006	6,144	11.4%	11.2%	11.0%
Other	1,764	1,931	2,026	3.4%	3.6%	3.6%
EBITDA	16,247	17,128	18,380	31.5%	32.0%	33.0%
Depreciation	2,960	3,196	3,452	5.7%	6.0%	6.2%
Earnings Before Interest and Taxes	13,287	13,932	14,928	25.8%	26.0%	26.8%
Interest Expense	1,488	2,580	2,448	2.9%	4.8%	4.4%
Earnings Before Tax	11,799	11,352	12,480	22.9%	21.2%	22.4%
Tax	3,155	2,861	3,012	6.1%	5.3%	5.4%
Net Income	8,644	8,491	9,468	16.8%	15.9%	17.0%

As you see in the above example, we do a thorough analysis of the income statement by seeing each line item as a proportion of revenue.

The key metrics we look at are:

- Cost of Goods Sold (COGS) as a percent of revenue
- Gross profit as a percent of revenue
- Depreciation as a percent of revenue

Earnings Before Tax (EBT) as a percent of revenue

Tax as a percent of revenue

Net earnings as a percent of revenue

Horizontal Analysis

Now it's time to look at a different way to evaluate the income statement. With horizontal analysis, we look at the year-over-year (YoY) change in each line item.

In order to perform this exercise, you need to take the value in Period N and divide it by the value in Period N-1 and then subtract 1 from that number to get the percent change.

For the below example, revenue in Year 3 was $55,749, and in Year 2, it was $53,494. The YoY change in revenue is equal to $55,749 / $53,494 minus one, which equals 4.2%.

($ in millions)	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
Revenue	**51,585**	**53,494**	**55,749**	NA	3.7%	4.2%
COGS	27,697	28,429	29,200	NA	2.6%	2.7%
Gross Profit	**23,888**	**25,065**	**26,550**			
SG&A	5,877	6,006	6,144	NA	2.2%	2.3%
Other	1,764	1,931	2,026	NA	9.5%	4.9%
EBITDA	**16,247**	**17,128**	**18,380**	NA	5.4%	7.3%
Depreciation	2,960	3,196	3,452	NA	8.0%	8.0%
Earnings Before Interest and Taxes	**13,287**	**13,932**	**14,928**	NA	4.9%	7.1%
Interest Expense	1,488	2,580	2,448	NA	73.4%	(5.1%)
Earnings Before Tax	**11,799**	**11,352**	**12,480**	NA	(3.8%)	9.9%
Tax	3,155	2,861	3,012	NA	(9.3%)	5.3%
Net Income	**8,644**	**8,491**	**9,468**	NA	(1.8%)	11.5%

Analysis of Financial Statement – Example of Horizontal Analysis

2. Balance Sheet and Leverage Ratios

Let's move on to the balance sheet. In this section of financial statement analysis, we will evaluate the operational efficiency of the business. We will take several items on the income statement and compare them to accounts on the balance sheet.

The main liquidity ratios for a business are:

- Quick ratio
- Current ratio
- Net working capital

The main leverage ratios are:

- Debt to equity
- Debt to capital
- Debt to EBITDA
- Interest coverage
- Fixed charge coverage ratio

The main operating efficiency ratios are:

- Inventory turnover
- Accounts receivable days
- Accounts payable days
- Total asset turnover
- Net asset turnover

Using the above financial ratios, we can determine how efficiently a company is generating revenue and how quickly it's selling inventory.

We can also use the financial ratios derived from the balance sheet and compare them historically versus industry averages or competitors. This comparison will help you assess the solvency and leverage of a business.

3. Cash Flow Statement Analysis

With the income statement and balance sheet under our belt, let's look at the cash flow statement and all the insights it tells us about the

outflows of cash over the time period we're looking at.

Cash flow statement overview

The cash flow statement, or statement of cash flow, consists of three components:

- Cash from operations
- Cash used in investing
- Cash from financing

Each of these three sections tells us a unique and important part of the company's sources and uses of cash over a specific time period.

Many investors consider the cash flow statement the most important indicator of a company's performance.

Today, investors quickly flip to this section to see if the company is actually making money or not and what its funding requirements are.

It's important to understand how different ratios can be used to properly assess the operation of an organization from a cash management standpoint.

Below is an example of the cash flow statement and its three main components. Linking the 3 statements together in Excel is the building block of financial modeling.

Adjusted for:			
Depreciation	2,960	3,196	3,452
Stock-based Compensation	250	300	325
Change in Accounts Receivable	500	(1,500)	(1,000)
Change in Inventory	(3,000)	2,000	(1,400)
Change in Accounts Payable	(500)	500	1,000
Cash from Operations	**8,854**	**12,987**	**11,845**
Cash from Investing			
Purchase of PP&E	(5,000)	(5,500)	(6,000)
Acquisition of Business	–	(10,000)	–
Cash from Investing	**(5,000)**	**(15,500)**	**(6,000)**
Cash from Financing			
Issuance (Repayment) of Debt	6,000	3,500	18,500
Issuance (Repurchase) of Equity	–	–	30,000
Dividends	(100)	(150)	(200)
Cash from Financing	**5,900**	**3,350**	**48,300**
Net Change in Cash	9,754	837	54,145
Cash at Beginning of Period	6,680	7,000	12,750
Cash at End of Period	**16,434**	**7,837**	**66,895**

Cash Flow Statement Analysis

4. Rates of Return and Profitability Analysis

In this part of our analysis of financial statements, we unlock the drivers of financial performance with ratio analysis. By using a "pyramid" of ratios, we are able to demonstrate how you can determine the profitability, efficiency, and leverage drivers for any business.

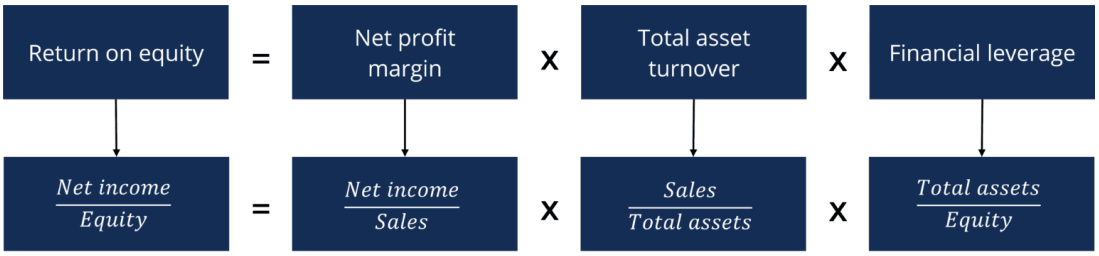
This is the most advanced section of our financial analysis course, and we recommend that you watch a demonstration of how professionals perform this analysis.

The course includes a hands-on case study and Excel templates that can be used to calculate individual ratios and a pyramid of ratios from any set of financial statements.

Profitability, efficiency, and leverage ratios

Primary, secondary, and tertiary ratios

Dupont analysis



Example of Rates of Return and Profitability Analysis

By constructing the pyramid of ratios, you will gain an extremely solid understanding of the business and its financial statements.

The Value of Analyzing Financial Statements

Analyzing financial statements is essential for understanding a company's financial position and future potential. It allows corporate finance professionals to uncover patterns and trends, informing strategic decisions and ensuring alignment with financial goals. Additionally, this analysis helps finance teams identify risks early and take corrective actions to maintain the financial stability of their companies.

In addition, financial statement analysis is the first step investors take when evaluating a company's profitability and viability as an investment. It provides a clear view of the company's financial health, including profitability, liquidity, and debt management, building investor confidence in the company's ability to generate returns and manage obligations. Ultimately, financial statement analysis guides internal strategies and attracts external investment by showcasing financial strength and resilience.

Additional Resources

How to Link the 3 Financial Statements

Mastering Financial Statement Aggregation and Analysis

See all accounting resources

See all financial modeling resources

Additional Resources

CFI is a global provider of financial modeling courses and of the FMVA Certification. CFI's mission is to help all professionals improve their technical skills. If you are a student or looking for a career change, the CFI website has many free resources to help you jumpstart your Career in Finance. If you are seeking to improve your technical skills, check out some of our most popular courses. Below are some additional resources for you to further explore:

Careers

CFI's Most Popular Courses

All CFI Resources

Finance Terms

The Financial Modeling Certification

Analyst Certification FMVA® Program

CFI is a global provider of financial modeling courses and of the FMVA Certification. CFI's mission is to help all professionals improve their technical skills. If you are a student or looking for a career change, the CFI website has many free resources to help you jumpstart your Career in Finance. If you are seeking to improve your technical skills, check out some of our most popular courses. Below are some additional resources for you to further explore:

Careers

CFI's Most Popular Courses

All CFI Resources

Finance Terms

The Financial Modeling Certification

Below is a break down of subject weightings in the FMVA® financial analyst program. As you can see there is a heavy focus on financial modeling, finance, Excel, business valuation, budgeting/forecasting, PowerPoint presentations, accounting and business strategy.

A well rounded financial analyst possesses all of the above skills!

Additional Questions & Answers

CFI is the global institution behind the financial modeling and valuation analyst FMVA® Designation. CFI is on a mission to enable anyone to be a great financial analyst and have a great career path. In order to help you advance your career, CFI has compiled many resources to assist you along the path.

In order to become a great financial analyst, here are some more questions and answers for you to discover:

What is Financial Modeling?

How Do You Build a DCF Model?

What is Sensitivity Analysis?

How Do You Value a Business?

Excel Tutorial

CFI is a global provider of financial modeling courses and of the FMVA Certification. CFI's mission is to help all professionals improve their technical skills. If you are a student or looking for a career change, the CFI website has many free resources to help you jumpstart your Career in Finance. If you are seeking to improve your technical skills, check out some of our most popular courses. Below are some additional resources for you to further explore:

Careers

CFI's Most Popular Courses

All CFI Resources

Finance Terms

The Financial Modeling Certification

Launch CFI's Excel Course now

to take your career to the next level and move up the ladder!

Share this article

Company

Certifications

CFI For Teams

Support

Community