

Financial Management

Prepared by
Dr. Mohamed Hussein
Assistant Professor of Accounting

MGM 424

Lecture 3



Financial Management

Lecture 3

MGM424 Financial Analysis

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Dr. Mohamed Hussein

Chapter

03

Financial Analysis





Chapter

3

Financial Analysis

Introduction

Identify Basics of Financial Statement Analysis

Explain Horizontal Analysis.

Explain Vertical Analysis

Identify Benefits & Limitations of Horizontal Analysis

Identify Benefits & Limitations of Vertical Analysis

Definition of Financial Statement Analysis:

- This refers to the process of reviewing and analyzing a company's financial statements to make better economic decisions.
- It involves examining the income statement, balance sheet, and cash flow statement to assess a company's financial health and performance.



Importance in Business Decision Making:

- Financial statement analysis is crucial for making informed business decisions, such as investment opportunities, credit lending, or managing a company's operations. By analyzing financial statements, decision-makers can assess



- **Two Key Techniques: Horizontal & Vertical Analysis**

Basics of Financial Statement Analysis

Apply horizontal and vertical analysis to financial statements.

Characteristics

- ◆ Liquidity
- ◆ Profitability
- ◆ Solvency

Comparison Bases

- ◆ Intracompany
- ◆ Industry averages
- ◆ Intercompany

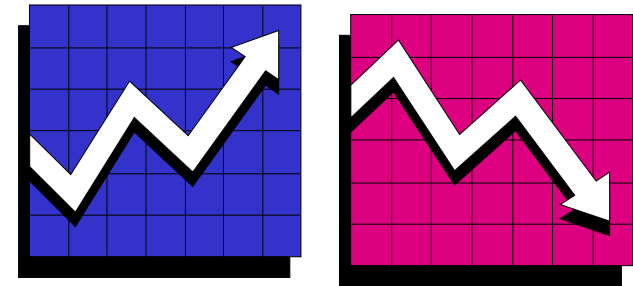
Tools of Analysis

- ◆ Horizontal
- ◆ Vertical
- ◆ Ratio

Horizontal Analysis

Horizontal analysis, also called **trend analysis**, is a technique for evaluating a series of financial statement data over a period of time.

- ◆ **Purpose** is to determine the increase or decrease.
- ◆ **Commonly applied to the**
 - ▶ statement of financial position,
 - ▶ income statement, and
 - ▶ statement of retained earnings.



Horizontal Analysis

Horizontal Analysis - Definition

Definition: A Technique to Analyze Trends Over Time:

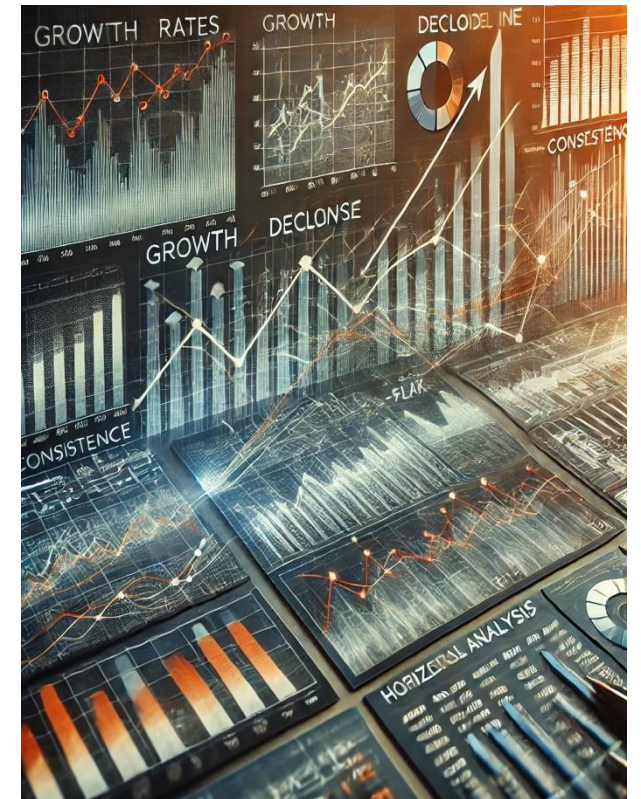
• **Horizontal Analysis** is a method used to evaluate the changes in financial statement items across multiple reporting periods. This approach allows businesses and analysts to observe how financial figures have fluctuated year over year or over a defined period. By comparing data from multiple years or periods, trends become visible, helping to assess financial health and performance over time.



Horizontal Analysis

Focus on Growth Rates, Decline, and Consistency:

- The primary focus of horizontal analysis is on:
 - **Growth Rates:** To identify periods of expansion, for example, by measuring how revenue or profits have grown.
 - **Decline:** It helps identify periods where financial performance has deteriorated, such as decreases in net income or assets.
 - **Consistency:** Horizontal analysis is used to spot patterns of stability, where financial performance remains consistent, which can be an indicator of healthy or stagnant performance depending on the situation.



Horizontal Analysis

How It Works:

- The analysis is typically conducted by **selecting a base year** and comparing financial items from subsequent years to this base. **The percentage change is calculated to measure the growth or decline.**

- Formula:**

$$\text{Percentage Change} = \left(\frac{\text{Current Year Value} - \text{Base Year Value}}{\text{Base Year Value}} \right) \times 100$$

- This formula helps determine **how much a line item**, such as revenue or net income, has increased or decreased over time.

Purpose of Horizontal Analysis

To Identify Trends and Patterns:

- One of the primary purposes of horizontal analysis is to identify **trends** and **patterns** in a company's financial performance. By comparing the same line items over multiple periods (such as years or quarters), you can observe how certain aspects of the business are growing, shrinking, or remaining stable.
- For example, tracking revenue, operating expenses, and net income year over year allows you to detect whether the company is experiencing growth, facing a downturn, or staying relatively consistent.

Purpose of Horizontal Analysis

Evaluate Financial Health Over Time:

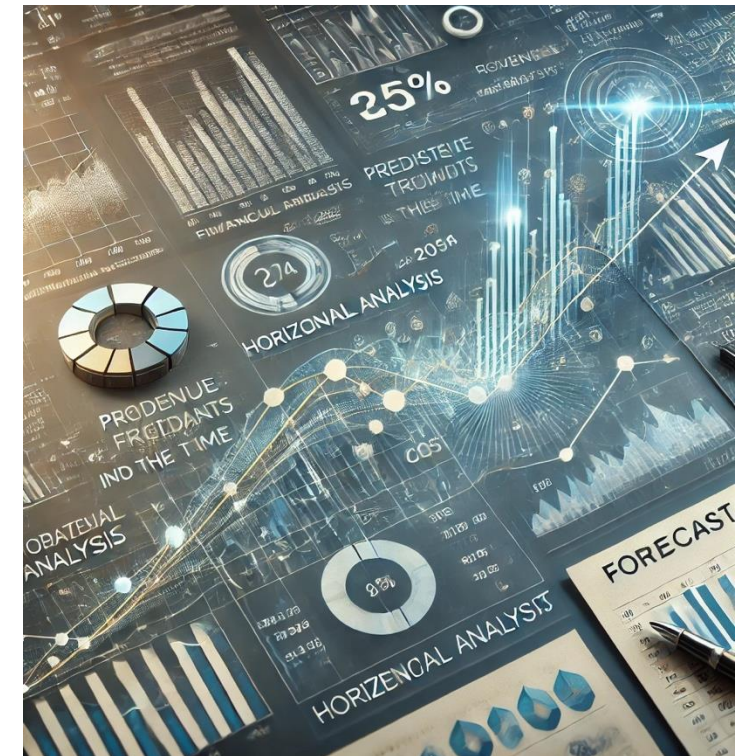
- Horizontal analysis provides a broader picture of the **financial health** of a business over time. Instead of focusing on a single year's results, this analysis helps determine if the company's financial condition is improving or worsening.
- By comparing key financial metrics such as profitability, liquidity, and solvency across different periods, stakeholders can make more informed decisions about the company's stability and sustainability.



Purpose of Horizontal Analysis

Make Predictions Based on Past Data:

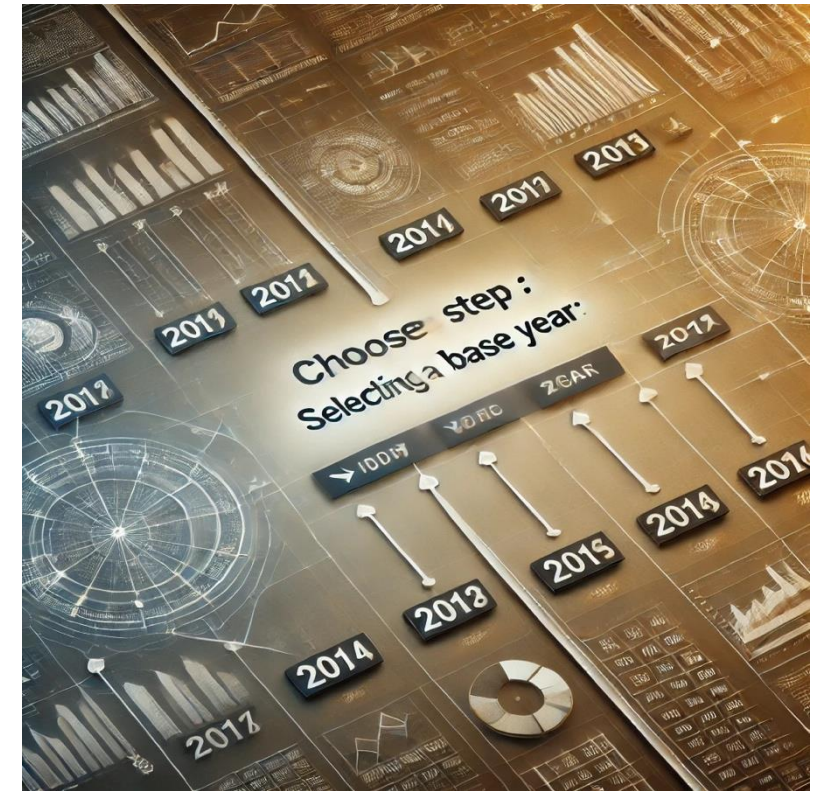
- Using horizontal analysis, businesses and analysts can **make predictions** and **forecasts** based on historical data. Recognizing consistent trends, such as revenue growth or cost increases, can help in forming future projections.
- For example, if a company has consistently increased its revenue by 5% per year, you could reasonably expect similar growth in the future unless external conditions change.



How to Perform Horizontal Analysis

Step 1: Select Base Year:

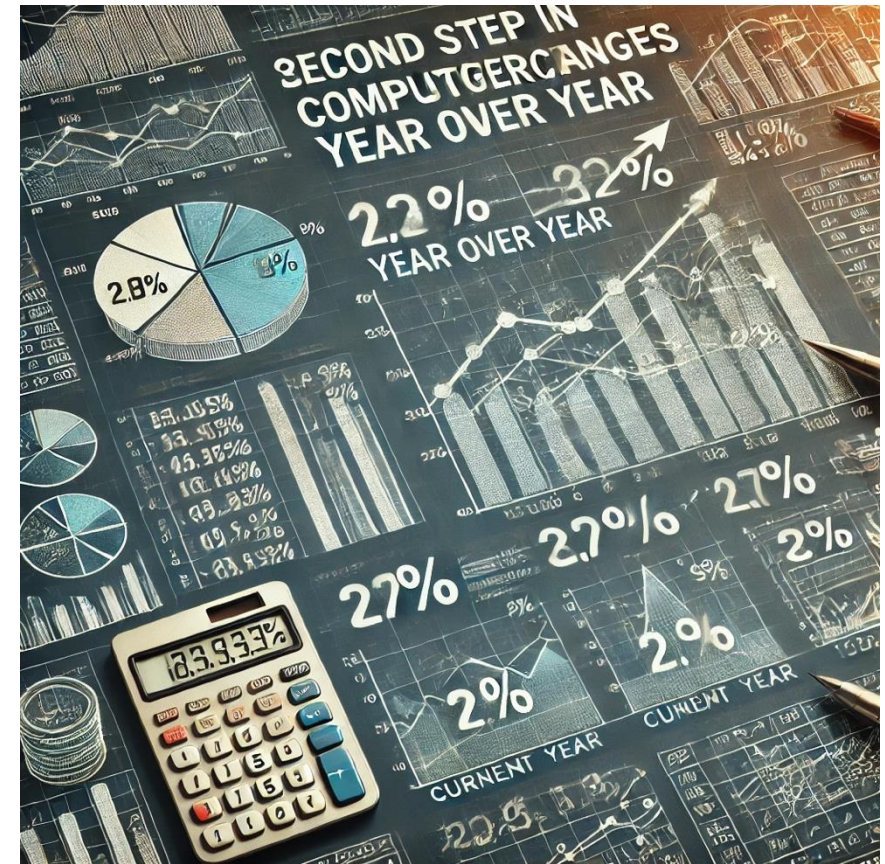
- The first step in performing horizontal analysis is to select a **base year**. This is the year against which all other years will be compared.
- The base year serves as the benchmark, allowing you to calculate how much the financial statement items have changed in subsequent periods. Ideally, the base year should be representative of normal business conditions or a stable period for accurate comparisons.



How to Perform Horizontal Analysis

Step 2: Compute Percentage Changes Year Over Year:

- After selecting the base year, the next step is to compute the **percentage changes** in financial statement items for each year compared to the base year.
- This involves comparing the figures of the current year with those of the base year. Percentage changes provide insight into the magnitude of growth or decline in financial performance over time.



Example: Horizontal Analysis

Example of an Income Statement with Two Years:

Below is a simplified income statement for two consecutive years (2022 and 2023) for a fictional company, XYZ Corp. We'll use this data to compute the percentage changes in Revenue, Expenses, and Net Income:

Income Statement	2022	2023
Revenue	\$500,000	\$600,000
Operating Expenses	\$300,000	\$350,000
Net Income	\$100,000	\$120,000

Compute Percentage Changes for Revenue, Expenses, and Net Income:

Chapter
03

Example: Horizontal Analysis

- Step 1: Compute percentage change for Revenue:

- Using the formula:

$$\text{Percentage Change} = \left(\frac{\text{Current Year} - \text{Base Year}}{\text{Base Year}} \right) \times 100$$

- For Revenue:

$$\frac{600,000 - 500,000}{500,000} \times 100 = 20\%$$

- The revenue increased by 20% from 2022 to 2023.

- Step 2: Compute percentage change for Operating Expenses:

- For Operating Expenses:

$$\frac{350,000 - 300,000}{300,000} \times 100 = 16.67\%$$

- Operating expenses increased by 16.67% from 2022 to 2023.

- Step 3: Compute percentage change for Net Income:

- For Net Income:

$$\frac{120,000 - 100,000}{100,000} \times 100 = 20\%$$

- Net income increased by 20% from 2022 to 2023.

Analysis:

- Revenue grew by 20%, indicating that the company was able to increase its sales.
- Operating expenses increased by a slightly lower rate (16.67%), which suggests that costs were managed efficiently relative to the growth in revenue.
- The net income also grew by 20%, showing that the company's profitability improved in proportion to its revenue growth.

Horizontal Analysis of Balance Sheet

Horizontal Analysis of Balance Sheet

Apply Analysis to Assets, Liabilities, and Equity:

Horizontal analysis of the balance sheet compares the changes in the company's **assets**, **liabilities**, and **equity** over time. This method helps to identify trends in how a company manages its resources, obligations, and capital structure.

Below is an example of a simplified balance sheet for two consecutive years (2022 and 2023) for XYZ Corp.:

Balance Sheet	2022	2023
Total Assets	\$1,000,000	\$1,200,000
Total Liabilities	\$600,000	\$700,000
Equity	\$400,000	\$500,000

We'll now compute the percentage changes for **Total Assets**, **Total Liabilities**, and **Equity**.

Horizontal Analysis of Balance Sheet

We'll now compute the percentage changes for Total Assets, Total Liabilities, and Equity.

- Step 1: Compute percentage change for Total Assets:

$$\frac{1,200,000 - 1,000,000}{1,000,000} \times 100 = 20\%$$

- Total Assets increased by 20% from 2022 to 2023.

- Step 2: Compute percentage change for Total Liabilities:

$$\frac{700,000 - 600,000}{600,000} \times 100 = 16.67\%$$

- Step 3: Compute percentage change for Equity:

$$\frac{500,000 - 400,000}{400,000} \times 100 = 25\%$$

- Equity increased by 25% from 2022 to 2023.

Horizontal Analysis of Balance Sheet

Analysis:

- The **20%** growth in **total assets** suggests that the company is expanding, possibly investing in new resources or equipment.
- The **16.67%** increase in **liabilities** indicates that the company is taking on some additional debt, but this is at a lower rate than the growth in assets.
- The **25%** increase in **equity** is a positive sign, showing the company is increasing its value for shareholders and reducing reliance on debt.

Horizontal Analysis of Cash Flow Statement

Evaluate Cash Flow Trends Over Time:

- The cash flow statement provides insights into the inflows and outflows of cash from a company's **operating**, **investing**, and **financing** activities. Horizontal analysis of the cash flow statement compares these cash flows over multiple periods to identify trends, such as increasing or decreasing liquidity and financial health.
- By analyzing how cash inflows and outflows change over time, you can assess whether the company is generating sufficient cash from its core business operations, how much it is investing in growth, and how it's managing debt and equity financing.

Horizontal Analysis of Cash Flow Statement

Evaluate Cash Flow Trends Over Time:

- Below is an example of a simplified cash flow statement for XYZ Corp. for two consecutive years (2022 and 2023):

Cash Flow Statement	2022	2023
Net Cash from Operating Activities	\$200,000	\$240,000
Net Cash from Investing Activities	(\$100,000)	(\$150,000)
Net Cash from Financing Activities	\$50,000	\$60,000
Net Change in Cash	\$150,000	\$150,000

Compare Operating, Investing, and Financing Cash Flows:

Chapter 03

Horizontal Analysis of Cash Flow Statement

• Step 1: Analyze Operating Cash Flows:

- The operating section reflects cash inflows and outflows from core business operations. This is a key indicator of the company's ability to generate sufficient cash from its ongoing activities.

- The net cash from operating activities increased from \$200,000 to \$240,000.

$$\frac{240,000 - 200,000}{200,000} \times 100 = 20\%$$

- **Operating cash flows** increased by **20%**, which is a positive sign that the company is generating more cash from its day-to-day operations.

• Step 2: Analyze Investing Cash Flows:

- The investing section shows cash used for or generated from the purchase or sale of long-term assets (e.g., equipment, property, or investments).
- In this case, the net cash from investing activities became more negative, from (\$100,000) to (\$150,000).

$$\frac{-150,000 - (-100,000)}{-100,000} \times 100 = -50\%$$

- The **negative 50% change** indicates that the company increased its investments by 50%, which may reflect investment in growth or expansion initiatives such as purchasing new assets.

Horizontal Analysis of Cash Flow Statement

- Step 3: Analyze Financing Cash Flows:
 - The financing section reflects cash inflows and outflows from raising capital (debt or equity) and repaying debt or paying dividends.
 - The net cash from financing activities increased from \$50,000 to \$60,000.
$$\frac{60,000 - 50,000}{50,000} \times 100 = 20\%$$
 - The **20% increase in financing cash flows** suggests that the company either raised more funds through debt or equity or decreased its repayment obligations slightly.

Horizontal Analysis of Cash Flow Statement

Analysis:

- The **20% growth in operating cash flows** indicates that the company is improving its ability to generate cash from its core operations, which is a positive indicator of financial health.
- The **50% increase in negative cash flows** from investing suggests that the company is investing heavily in long-term assets, possibly to fuel future growth. While this may reduce cash in the short term, it could lead to positive returns in the long run.
- The **20% increase in financing cash flows** suggests that the company is relying on external financing to some extent, but this may be due to funding investments or expanding its capital structure.

Clover, Inc.
Comparative Balance Sheets
December 31,

	2007	2006	Dollar Change	Percent Change*
Assets				
Current assets:				
Cash and equivalents	\$ 12,000	\$ 23,500	?	?
Accounts receivable, net	60,000	40,000		
Inventory	80,000	100,000		
Prepaid expenses	3,000	1,200		
Total current assets	\$ 155,000	\$ 164,700		
Property and equipment:				
Land	40,000	40,000		
Buildings and equipment, net	120,000	85,000		
Total property and equipment	\$ 160,000	\$ 125,000		
Total assets	\$ 315,000	\$ 289,700		

* Percent rounded to one decimal point.

Clover, Inc.
Comparative Balance Sheets
December 31,

	2007	2006	Dollar Change	Percent Change*
Assets				
Current assets:				
Cash and equivalents	\$ 12,000	\$ 23,500	\$ (11,500)	?
Accounts receivable, net	60,000	40,000		
Inventory	80,000	100,000		
Prepaid expenses	3,000	1,200		
Total current assets				
Property and equipment:				
Land	40,000	40,000		
Buildings and equipment, net	120,000	85,000		
Total property and equipment	\$ 160,000	\$ 125,000		
Total assets	\$ 315,000	\$ 289,700		

$$\$12,000 - \$23,500 = \$ (11,500)$$

* Percent rounded to one decimal point.

Clover, Inc.
Comparative Balance Sheets
December 31,

	2007	2006	Dollar Change	Percent Change*
Assets				
Current assets:				
Cash and equivalents	\$ 12,000	\$ 23,500	\$ (11,500)	-48.9%
Accounts receivable, net	60,000	40,000		
Inventory	80,000	100,000		
Prepaid expenses	3,000	1,200		
Total current assets	(\$11,500 ÷ \$23,500) × 100% = 48.94%			
Property and equipment:				
Land	40,000	40,000		
Buildings and equipment, net	120,000	85,000		
Total property and equipment	\$ 160,000	\$ 125,000		
Total assets	\$ 315,000	\$ 289,700		

* Percent rounded to one decimal point.

**Complete the analysis
for the other assets.**

Clover, Inc.
Comparative Balance Sheets
December 31,

	2007	2006	Dollar Change	Percent Change*
Assets				
Current assets:				
Cash and equivalents	\$ 12,000	\$ 23,500	\$ (11,500)	-48.9%
Accounts receivable, net	60,000	40,000	20,000	50.0%
Inventory	80,000	100,000	(20,000)	-20.0%
Prepaid expenses	3,000	1,200	1,800	150.0%
Total current assets	\$ 155,000	\$ 164,700	(9,700)	-5.9%
Property and equipment:				
Land	40,000	40,000	-	0.0%
Buildings and equipment, net	120,000	85,000	35,000	41.2%
Total property and equipment	\$ 160,000	\$ 125,000	35,000	28.0%
Total assets	\$ 315,000	\$ 289,700	\$ 25,300	8.7%

* Percent rounded to one decimal point.

**Berry Products
Income Information
For the Years Ended December 31,**

Item	2007	2006	2005	2004	2003
Revenues	\$ 400,000	\$ 355,000	\$ 320,000	\$ 290,000	\$ 275,000
Cost of sales	285,000	250,000	225,000	198,000	190,000
Gross profit	115,000	105,000	95,000	92,000	85,000

Item	2007	2006	2005	2004	2003
Revenues	145%	129%	116%	105%	100%
Cost of sales	150%	132%	118%	104%	100%
Gross profit	135%	124%	112%	108%	100%

$$(290,000 \div 275,000) \times 100\% = 105\%$$

$$(198,000 \div 190,000) \times 100\% = 104\%$$

$$(92,000 \div 85,000) \times 100\% = 108\%$$

Horizontal Analysis

Quality Department Store Condensed Statements of Financial Position December 31

	2020	2019	Increase or (Decrease) during 2020	
			Amount	Percent
Assets				
Intangible assets	€ 15,000	€ 17,500	€ (2,500)	(14.3%)
Plant assets (net)	800,000	632,500	167,500	26.5%
Current assets	1,020,000	945,000	75,000	7.9%
Total assets	€1,835,000	€1,595,000	€240,000	15.0%
Equity				
Share capital—ordinary, €1 par	€ 275,400	€ 270,000	€ 5,400	2.0%
Retained earnings	727,600	525,000	202,600	38.6%
Total equity	1,003,000	795,000	208,000	26.2%
Liabilities				
Non-current liabilities	€ 487,500	€ 497,000	€ (9,500)	(1.9%)
Current liabilities	344,500	303,000	41,500	13.7%
Total liabilities	832,000	800,000	32,000	4.0%
Total equity and liabilities	€1,835,000	€1,595,000	€240,000	15.0%

Changes suggest that the company expanded its asset base during 2020 and financed this expansion primarily by retaining income rather than assuming additional long-term debt.

DO IT! 1 | Horizontal Analysis

Summary financial information for Rosepatch NV is as follows.

	<u>December 31, 2020</u>	<u>December 31, 2019</u>
Plant assets (net)	€756,000	€420,000
Current assets	<u>234,000</u>	<u>180,000</u>
Total assets	<u>€990,000</u>	<u>€600,000</u>

Compute the amount and percentage changes in 2020 using horizontal analysis, assuming 2019 is the base year.

Solution

	<u>Amount</u>	<u>Increase in 2020</u>
Plant assets (net)	€336,000	
Current assets	<u>54,000</u>	
Total assets	<u>€390,000</u>	65% [(€990,000 – €600,000) ÷ €600,000]

Horizontal Analysis

Quality Department Store Condensed Income Statements For the Years Ended December 31

	2020	2019	Increase or (Decrease) during 2020	
			Amount	Percent
Sales revenue	€2,195,000	€1,960,000	€235,000	12.0%
Sales returns and allowances	98,000	123,000	(25,000)	(20.3%)
Net sales	2,097,000	1,837,000	260,000	14.2%
Cost of goods sold	1,281,000	1,140,000	141,000	12.4%
Gross profit	816,000	697,000	119,000	17.1%
Selling expenses	253,000	211,500	41,500	19.6%
Administrative expenses	104,000	108,500	(4,500)	(4.1%)
Total operating expenses	357,000	320,000	37,000	11.6%
Income from operations	459,000	377,000	82,000	21.8%
Other income and expense				
Interest and dividends	9,000	11,000	(2,000)	(18.2%)
Interest expense	36,000	40,500	(4,500)	(11.1%)
Income before income taxes	432,000	347,500	84,500	24.3%
Income tax expense	168,200	139,000	29,200	21.0%
Net income	€ 263,800	€ 208,500	€ 55,300	26.5%

Overall, gross profit and net income were up substantially. Gross profit increased 17.1%, and net income, 26.5%. Quality's profit trend appears favorable.

HELPFUL HINT

Note that though the amount column is additive (the total is €55,300), the percentage column is not additive (26.5% is not the column total). A separate percentage has been calculated for each item.

Benefits of Horizontal Analysis

Identifies Growth Trends:

- Horizontal analysis helps **track the growth** of a company over time by identifying trends in key financial metrics, such as revenue, expenses, and profitability

Helps in Forecasting Future Performance:

- By recognizing past trends, horizontal analysis allows for **more accurate forecasting** of future financial performance. Historical growth rates can be used as a basis to predict future revenue, expenses, and profit levels.

Reveals Inefficiencies or Strengths:

- Horizontal analysis can **highlight areas of strength or inefficiency** within the business. For example, a faster increase in expenses compared to revenue might indicate inefficiencies in cost management.

Limitations of Horizontal Analysis

Dependent on Accuracy of Historical Data:

- The effectiveness of horizontal analysis heavily depends on the **accuracy and consistency** of historical financial data.

Inflationary Effects Can Distort Trends:

- Over time, **inflation** can affect the purchasing power of money, making it difficult to compare financial figures across multiple years.

May Not Provide a Complete Picture on Its Own:

- Horizontal analysis only shows **relative changes** between periods and doesn't provide insights into the causes of those changes. It doesn't account for market conditions, one-time events, or other external factors that could significantly influence financial performance.

Vertical Analysis

Vertical analysis, also called **common-size analysis**, is a technique that expresses each financial statement item as a percent of a base amount (see Decision Tools).

- ◆ On an **income statement**, we might say that selling expenses are 16% of net sales.
- ◆ Vertical analysis is commonly applied to the
 - ▶ statement of financial position and
 - ▶ income statement.

Vertical Analysis

Definition:

- Vertical analysis is a method used to analyze financial statements by expressing each item as a percentage of a base figure. This approach allows for easier comparisons between different companies or periods by standardizing financial data into percentages.



Chapter
03

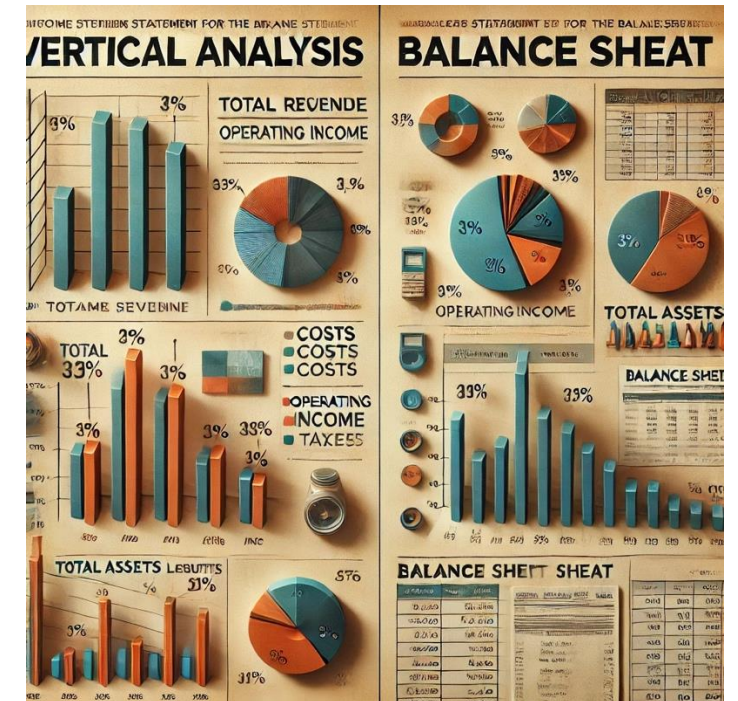
Vertical Analysis

Income Statement:

- For the income statement, the **base figure** is typically **total revenue**. Each item, such as costs, operating income, and taxes, is expressed as a percentage of revenue.

Balance Sheet:

- On the balance sheet, the **base figure** is typically **total assets**. Assets, liabilities, and equity are all represented as percentages of total assets, allowing for easy comparison of a company's capital structure.



Purpose of Vertical Analysis

To Compare Company Performance Across Periods or with Other Firms:

- Vertical analysis allows for consistent comparison of financial data over time or between companies, irrespective of their size. For example, comparing the cost structure or profitability of two firms with different revenue levels becomes easier when using percentages

Analyze Proportion of Expenses, Assets, and Liabilities:

- By breaking down financial items into percentages of a base figure, vertical analysis helps to understand the proportion of costs, expenses, or liabilities relative to the total. This provides insights into how resources are being allocated or how the company is structured financially

How to Perform Vertical Analysis

Step 1: Identify the Base Figure:

- Choose the base figure for your analysis. For the income statement, it's typically **total revenue**; for the balance sheet, it's usually **total assets**.

Step 2: Divide Each Item by the Base Figure:

- For each item on the financial statement, divide the figure by the base figure to calculate the percentage.

Formula:

$$\text{Percentage} = \left(\frac{\text{Item}}{\text{Base Figure}} \right) \times 100$$

- For example, if operating expenses are \$200,000 and total revenue is \$1,000,000, the percentage of operating expenses would be:

$$\frac{200,000}{1,000,000} \times 100 = 20\%$$

Chapter
03**Example: Vertical Analysis****Example of an Income Statement with Percentage Calculations:**

Below is a simplified income statement for XYZ Corp. showing vertical analysis where revenue is set at 100%.

Income Statement	2023 Amount	% of Revenue
Revenue	\$1,000,000	100%
Cost of Goods Sold (COGS)	\$600,000	60%
Operating Expenses	\$200,000	20%
Net Income	\$100,000	10%

Break Down Costs, Operating Income, and Taxes:

- **COGS** is 60% of revenue, indicating that 60 cents of every dollar of sales goes to cover the cost of goods.
- **Operating expenses** are 20% of revenue, showing how much is spent on operational activities.
- **Net income** is 10% of revenue, indicating the profitability margin.



Chapter
03

Vertical Analysis of Income Statement

Analyze Cost Structure:

- Vertical analysis helps analyze the company's cost structure by looking at the proportion of expenses like **COGS**, **operating expenses**, and **net profit** as percentages of revenue.

Identify Patterns in Profitability Margins:

- A higher percentage of COGS could indicate lower gross margins, while higher operating expenses may suggest inefficiencies. Identifying these patterns helps in strategic decision-making about cost control and efficiency improvements.



Vertical Analysis of Balance Sheet

Examine Liquidity and Capital Structure:

- On the balance sheet, vertical analysis can show the **percentage of current assets** (which indicate liquidity) compared to **total assets**. Similarly, it can show the proportion of **liabilities** and **equity** relative to total assets, which reveals the company's capital structure.

Asset Percentages vs. Liability and Equity Percentages:

- For instance, if 50% of a company's assets are financed through liabilities and 50% through equity, this reveals its approach to financing, with implications for financial risk.



Chapter
03

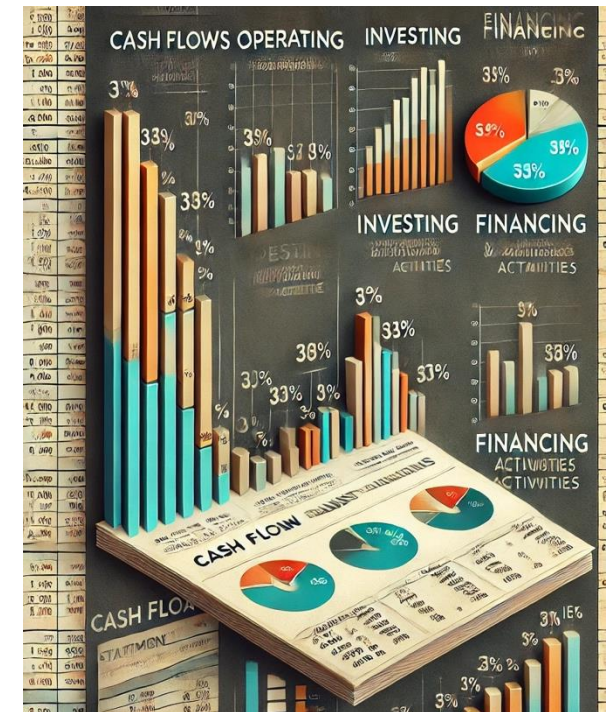
Vertical Analysis of Cash Flow Statement

Analyze Proportions of Operating, Investing, and Financing Cash Flows:

- In a cash flow statement, vertical analysis shows the proportion of cash flows from **operating activities** versus **investing** and **financing activities**. This helps identify how much of the cash generated is coming from core operations as opposed to external financing or asset sales.

Compare Across Companies or Industry Benchmarks:

- This analysis can be compared with industry benchmarks to assess whether the company is generating sufficient cash from operations or relying too much on financing or asset sales to stay liquid.



Clover, inc.
Comparative Balance Sheets
December 31,

Complete the common-size analysis for the other assets.			Common-size Percents*	
	2007	2006	2007	2006
Assets				
Current assets:				
Cash and equivalents	\$ 12,000	\$ 23,500	3.8%	8.1%
Accounts receivable, net	60,000	40,000		
Inventory	80,000	100,000		
Prepaid expenses	3,000	1,000		
Total current assets	\$ 155,000	\$ 164,500		
Property and equipment				
Land				
Buildings and equipment, net	120,000	85,000		
Total property and equipment	\$ 160,000	\$ 125,000		
Total assets	\$ 315,000	\$ 289,700	100.0%	100.0%

$$(\$12,000 \div \$315,000) \times 100\% = 3.8\%$$

$$(\$23,500 \div \$289,700) \times 100\% = 8.1\%$$

* Percent rounded to first decimal point.

Clover, Inc.
Comparative Balance Sheets
December 31,

			Common-size Percents*	
	2007	2006	2007	2006
Assets				
Current assets:				
Cash and equivalents	\$ 12,000	\$ 23,500	3.8%	8.1%
Accounts receivable, net	60,000	40,000	19.0%	13.8%
Inventory	80,000	100,000	25.4%	34.6%
Prepaid expenses	3,000	1,200	1.0%	0.4%
Total current assets	\$ 155,000	\$ 164,700	49.2%	56.9%
Property and equipment:				
Land	40,000	40,000	12.7%	13.8%
Buildings and equipment, net	120,000	85,000	38.1%	29.3%
Total property and equipment	\$ 160,000	\$ 125,000	50.8%	43.1%
Total assets	\$ 315,000	\$ 289,700	100.0%	100.0%

*** Percent rounded to first decimal point.**

Clover, Inc.
Comparative Balance Sheets
December 31,

			Common-size Percents*	
	2007	2006	2007	2006
Liabilities and Shareholders' Equity				
Current liabilities:				
Accounts payable	\$ 67,000	\$ 44,000	21.3%	15.2%
Notes payable	3,000	6,000	1.0%	2.1%
Total current liabilities	\$ 70,000	\$ 50,000	22.3%	17.3%
Long-term liabilities:				
Bonds payable, 8%	75,000	80,000	23.8%	27.6%
Total liabilities	\$ 145,000	\$ 130,000	46.1%	44.9%
Shareholders' equity:				
Preferred stock	20,000	20,000	6.3%	6.9%
Common stock	60,000	60,000	19.0%	20.7%
Additional paid-in capital	10,000	10,000	3.2%	3.5%
Total paid-in capital	\$ 90,000	\$ 90,000	28.5%	31.1%
Retained earnings	80,000	69,700	25.4%	24.0%
Total shareholders' equity	\$ 170,000	\$ 159,700	53.9%	55.1%
Total liabilities and shareholders' equity	\$ 315,000	\$ 289,700	100.0%	100.0%

* Percent rounded to first decimal point.

Clover, Inc.
Comparative Income Statements
For the Years Ended December 31,

			Common-size Percents*	
	2007	2006	2007	2006
Revenues	\$ 520,000	\$ 480,000	100.0%	100.0%
Costs and expenses:				
Cost of sales	360,000	315,000	69.2%	65.6%
Selling and admin.	128,600	126,000	24.7%	26.3%
Interest expense	6,400	7,000	1.2%	1.5%
Income before taxes	\$ 25,000	\$ 32,000	4.8%	6.7%
Income taxes (30%)	7,500	9,600	1.4%	2.0%
Net income	\$ 17,500	\$ 22,400	3.4%	4.7%
Net income per share	\$ 0.79	\$ 1.01		
Avg. # common shares	22,200	22,200		

* Rounded to first decimal point.

Chapter
03

Benefits of Vertical Analysis

Easy to Interpret Financial Statement Relationships:

- Vertical analysis simplifies financial statements by converting all figures into percentages, making it easier to understand relationships between items

Facilitates Comparisons Across Different Companies and Periods:

- Since vertical analysis converts items into percentages, it allows for easy comparison between companies of different sizes or across different time periods.

Helps Identify Major Areas of Spending and Saving:

- It highlights which items take up the largest share of revenue or assets, helping management to pinpoint where cost reductions or improvements can be made.



Limitations of Vertical Analysis

Doesn't Account for Time (Snapshot View):

- Vertical analysis is a **snapshot** of a single period and doesn't show trends over time.

Inflation Can Distort the Proportion Analysis:

- Inflation may cause distortions in the analysis, as the value of money changes over time. A company's expenses as a percentage of revenue might appear stable, but in real terms, costs could be rising due to inflation.

Might Overlook Important Long-Term Trends:

- Since vertical analysis focuses on a single period, it may miss important long-term trends, such as gradual increases in expenses or declining profitability. This limitation makes it necessary to use vertical analysis alongside horizontal analysis for a more complete view.



Thank You