

# Who uses Financial Statement Analysis?

## Who uses Financial Statement Analysis?

- Almost Everyone in the Business World
  - Bankers – analyze loans and cash flow
  - Portfolio Managers – projections of stock prices
  - Marketing Managers – market penetration and impacts to profitability
  - Human Resources – compensation analysis
  - Senior Management – corporate strategy
  - Sales Managers – commission rates on sales
  - Internal Financial Analysts – profitability analysis
  - Customer Service Managers – efficiency ratios

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## Banking – Loan Underwriter

- What is a Loan Underwriter?
  - A loan underwriter analyzes the loan application and supported materials to determine if the loan should be approved.
- Where do Loan Underwriters work?
  - Commercial Banks
  - Investment Banks (Bond Underwriters)
  - Financing Institutions (Mortgage Companies)
- What is a Loan Underwriter looking to do?
  - Analyze the credit quality of a business
  - Project cash flow and interest coverage
  - Gain an understanding of the business
- In the end, a bank is only looking to get paid back and earn interest.

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## Loan Package

- When a company applies for a loan, any of the following can be requested by the bank:
  - Loan application
  - 3 years financial statements
  - 3 years personal tax returns of owner (if the company is a small business)
  - Accounts Receivable aging schedule
  - Names of customers and suppliers for references

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## Accounts Receivable & Inventory

- Almost half of all loan requests are for a working capital line of credit.
  - A working capital line of credit works like a credit card (only without the card). A company can draw up and down on the line and only pay interest on outstanding balances.
  - Most working capital lines of credit are based off of a percentage of accounts receivable and inventory.
    - For example: A \$500,000 line of credit based 80% on accounts receivable and 50% of finished goods inventory.
  - Therefore, Accounts Receivable and Inventory are two of the most important balance sheet accounts for a banker

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# Who uses Financial Statement Analysis?

## Financial Analysis – Accounts Receivable

- Accounts Receivable (A/R) is the fastest non-liquid asset to convert to cash

Questions to Ask	Reason
What % of sales are returned? Why?	Are returns a significant part of the business model? Are returns due to poor quality?
What % of sales are sold on credit?	How reliant is the company on extending credit?
What % of sales are written-off?	Do they continue to sell to customers who don't pay?
Is there a concentration with one or two sales people?	What if those sales people leave?
What % of sales are guaranteed (contractually obligated)?	What happens when the contract expires? Where is new business coming from?
What % of sales are foreign?	Do they use letters of credit to protect against non-payment? Foreign customers are hard to collect from.
What % of sales is to the government?	The government is typically slow paying

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## Financial Analysis – Accounts Receivable

- Accounts Receivable Aging Schedule
  - A schedule of all outstanding receivables grouped both by customer and due date

Questions to Ask	Reason
Is there a concentration greater than 10% of any customers?	What happens if they lose a large customer?
What % of customers are past due?	How reliable are their accounts receivable
Are there any receivables over 120 days past due that have not been written-off?	Typically these will not be collected and should be backed out of the total accounts receivable

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## Financial Analysis - Inventory

- Inventory is typically the largest current asset and is what the company tries to convert to cash.
- Inventory includes:
  - Raw materials inventory
  - Work-in-Process inventory
  - Finished goods inventory
- In case of liquidation
  - Raw materials inventory can be sold back to the supplier (at a fraction of the cost)
  - Finished goods inventory can be sold to customers (at a fraction of the cost)

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## Financial Analysis - Inventory

Questions to Ask	Reason
How does the company inventory compare with the industry average?	Do they carry too much? Too little? Do they have too much in finished goods inventory?
Is inventory valued at LIFO, FIFO, or Weighted Average?	This will impact the cost of goods sold and inventory balance. Could inventory be obsolete?
What % of current assets is made up of inventory?	Inventory is typically the hardest current asset to convert to cash
What % of inventory is work-in-process?	This inventory is virtually worthless. What can you do with the frame of a car?

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# Who uses Financial Statement Analysis?

## Financial Analysis - Ratios

- **Liquidity Ratios – Current Ratio:**
  - Current Assets / Current Liabilities
- **Measures a firm's ability to meet current obligations**
  - – **Quick Ratio (Acid Test):**  $(\text{Current Assets} - \text{Inventory}) / \text{Current Liabilities}$
  - **Measures a firm's ability to meet current obligations without liquidating inventory**

Questions to Ask	Reason
Calculate the Current Ratio	Too low suggests a lack of liquidity, too high suggests financial assets are not used efficiently
How does the company's current ratio compare with companies of similar size in their industry?	If they are not in-line with the industry, then the underwriter must find out why.
Are liabilities being paid on time?	If suppliers and service bills are being stretched, this would decrease the current ratio.
How much is inventory weighted in current assets?	Inventory is the most difficult current asset to convert to cash? How quickly is it turning over?
Are accounts receivable over 120 days being written off?	These accounts will probably not be collected and should be removed from current assets
Exclude Prepaid Current Assets	Cash cannot easily be obtained from a prepaid phone bill or rent

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## Financial Analysis - Ratios

- **Leverage Ratios – Debt-Equity Ratio:**
  - Total Liabilities / Total Net Worth
  - Measures the funds contributed by owners or shareholders versus creditors.

Questions to Ask	Reason
Calculate the Debt-Equity ratio	<ul style="list-style-type: none"> <li>■ Banks generally like to see this ratio below 40%</li> <li>■ If this ratio was greater than 50%, the company would primarily be financed by creditors                             <ul style="list-style-type: none"> <li>□ The owners would be more likely to declare bankruptcy in the event of a downturn, as they would have less to lose</li> </ul> </li> </ul>
How much of total liabilities are current liabilities?	Matching Principle: current assets should be financed with current liabilities, long-term assets should be financed with long-term debt

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## Financial Analysis - Ratios

- **Efficiency Ratios – Accounts Receivable Turnover:**
  - $(\text{Accounts Receivable} / \text{Sales}) \times 365$
  - Measures the average number of days it takes the company to collect their receivables.

Questions to Ask	Reason
Calculate the Accounts Receivable Turnover	The shorter the better <ul style="list-style-type: none"> <li>■ The faster a company can collect, the faster they have cash</li> <li>■ The less time they need to borrow</li> </ul>
Is the accounts receivable turnover relatively close to the company's financing terms?	If they sell on 2/10 net 30, one would expect to see a turnover around 30 days. A few days over is ok, but 40 or 45 would be too long
Are accounts receivable over 120 days being written off?	These accounts will probably not be collected and should be removed from current assets
How does the company's turnover compare with the industry?	The turnover should be close to industry averages, if not, the underwriter needs to know why

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## Financial Analysis - Ratios

- **Efficiency Ratios – Inventory Turnover:**
  - $(\text{Inventory} / \text{Cost of Goods Sold}) \times 365$
  - Measures the average number of days inventory is on hand

Questions to Ask	Reason
Calculate the Inventory Turnover	The shorter the better <ul style="list-style-type: none"> <li>■ The faster a company can sell its inventory, the faster they have cash</li> <li>■ The less time they need to borrow</li> </ul>
Which inventory valuation method do they use? LIFO, FIFO, or weighted average?	Which method is standard for the industry? Have they changed valuation methods recently? If so, why?
Is the inventory turnover different for different products?	Are some products selling and others not? Are some products becoming obsolete?
How does the company's turnover compare with the industry?	The turnover should be close to industry averages, if not, the underwriter needs to know why

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# Who uses Financial Statement Analysis?

## Financial Analysis - Ratios

- Efficiency Ratios – Accounts Payable Turnover:
  - $(\text{Accounts Payable} / \text{Cost of Goods Sold}) \times 365$
  - Measures the average number of days the company takes to pay its suppliers

Questions to Ask	Reason
Calculate the Accounts Payable Turnover	This is a sensitive ratio: <ul style="list-style-type: none"> <li>■ The longer the turnover, the longer the company has cash</li> <li>■ If the supplier get stretched to much, they may not sell to the company, which can put the company out of business</li> </ul>
What terms to the suppliers offer?	Is the company taking advantage of discounts?
Supplier reference check	An underwriter will want to call 3 or 4 suppliers to confirm the company is in good standing
How does the company's turnover compare with the industry?	The turnover should be close to industry averages, if not, the underwriter needs to know why

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## Financial Analysis - Ratios

- Profitability Ratios – Gross Profit Margin:
  - $(\text{Sales} - \text{Cost of Good Sold}) / \text{Sales}$
  - Measures the differential between what it costs to manufacture or purchase the product and how much the product is sold.

Questions to Ask	Reason
Calculate the Gross Profit Margin	The higher the gross profit margin, the more money is available to cover the operating costs of the company
Has the gross profit margin changed over time?	This can show the impact of price changes or changes in the cost of inventory.
Understand the industry	Certain industries may have tighter margins, such as technology retail.
How does the company's turnover compare with the industry?	The turnover should be close to industry averages, if not, the underwriter needs to know why

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## Financial Analysis - Ratios

- Profitability Ratios – Return on Equity (ROE):
  - $\text{Net Income} / \text{Total Equity}$
  - Measures the relationship between profits and the investment of the owners.

Questions to Ask	Reason
Calculate the Return on Equity	This ratio will have a direct impact on the company's ability to raise capital
Has the ROE changed over time?	This can show changes in capital structure, infusions of capital, an changes in net income
How does the company's turnover compare with the industry?	The ROE may be close to the industry, despite low profits, as the company may have higher levels of liabilities

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## Financial Projections

- Loan underwriters must take their ratios and analysis of the financial statements and project the company's financial statements to show adequate cash flow to repay the loan.
- Financials are projected by each account shown on the financial statements.
  - The method of projections may vary by industry
  - The method of projections may vary based on which accounts are shown on the financial statements
    - All companies prepare and publish their financial statements in different ways

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