
Financial Ratios and Quality Indicators

From U.S. Small Business Administration Online Women's Business Center

If you monitor the ratios on a regular basis you'll gain insight into how effectively you are managing your business.

Lenders also like to evaluate risk by using several sets of ratios; ratios of assets to liabilities, and ratios of lender-investor dollars to owner-investor dollars. Recognize that ratios are indicators and that only you can tell the full story about your business. So the more adept you are at explaining your financial ratios to your lender, the better she'll understand your business as she makes a credit decision.

LIQUIDITY

Financial ratios in this category measure the company's capacity to pay its debts as they come due.

Current Ratio

Definition: The ratio between all current assets and all current liabilities; another way of expressing liquidity.

Formula:
$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Analysis: 1:1 current ratio means; the company has \$1.00 in current assets to cover each \$1.00 in current liabilities. Look for a current ratio above 1:1 and as close to 2:1 as possible. One problem with the current ratio is that it ignores timing of cash received and paid out. For example, if all the bills are due this week, and inventory is the only current asset, but won't be sold until the end of the month, the current ratio tells very little about the company's ability to survive.

Quick Ratio

Definition: The ratio between all assets quickly convertible into cash and all current liabilities. Specifically excludes inventory.

Formula:
$$\frac{\text{Cash} + \text{Accounts Receivable}}{\text{Current Liabilities}}$$

Analysis: Indicates the extent to which you could pay current liabilities without relying on the sale of inventory -- how quickly you can pay your bills. Generally, a ratio of 1:1 is good and indicates you don't have to rely on the sale of inventory to pay the bills. Although a little better than the Current ratio, the Quick ratio still ignores timing of receipts and payments.

SAFETY

Indicator of the businesses' vulnerability to risk. These ratios are often used by creditors to determine the ability of the business to repay loans.

Debt to Equity

Definition: Shows the ratio between capital invested by the owners and the funds provided by lenders.

Formula:
$$\frac{\text{Debt}}{\text{Equity}}$$

Analysis: Comparison of how much of the business was financed through debt and how much was financed through equity. For this calculation it is common practice to include loans from owners in equity rather than in debt.

The higher the ratio, the greater the risk to a present or future creditor. Look for a debt to equity ratio in the range of 1:1 to 4:1. Most lenders have credit guidelines and limits for the debt to equity ratio (2:1 is a commonly used limit for small business loans).

Too much debt can put your business at risk... but too little debt may mean you are not realizing the full potential of your business -- and may actually hurt your overall profitability. This is particularly true for larger companies where shareholders want a higher reward (dividend rate) than lenders (interest rate). If you think that you might be in this situation, talk to your accountant or financial advisor.

Debt coverage ratio

Definition: Indicates how well cash flow covers debt and the capacity of the business to take on additional debt.

Formula:
$$\frac{\text{Net Profit} + \text{Non-cash expenses}}{\text{Debt}}$$

Analysis: Shows how much of your cash profits are available to repay debt. Lenders look at this ratio to determine if there is adequate cash to make loan payments. Most lenders also have limits for the debt coverage ratio.

PROFITABILITY

The ratios in this section measure the ability of the business to make a profit.

Sales Growth

Definition: Percentage increase (or decrease) in sales between two time periods.

Formula:
$$\frac{\text{Current Period sales} - \text{Previous Period sales}}{\text{Previous Period sales}}$$

Analysis: Look for a steady increase in sales. If overall costs and inflation are on the rise, then you should watch for a related increase in your sales... if not, then this is an indicator that your Prices are not keeping up with your costs.

Cost of Goods Sold (COGS) to Sales

Definition: Percentage of sales used to pay for expenses which vary directly with sales.

Formula:
$$\frac{\text{Cost of Goods Sold}}{\text{Sales}}$$

Analysis: Look for a stable ratio as an indicator that the company is controlling its gross margins.

Gross Profit Margin

Definition: Indicator of how much profit is earned on your products without consideration of selling and administration costs.

Formula:
$$\frac{\text{Gross Profit}}{\text{Total Sales}}$$

Where Gross Profit = Sales less Cost of Goods Sold

Analysis: Compare to other businesses in the same industry to see if your business is operating as profitably as it should be. Look at the trend from month to month. Is it staying the same? Improving? Deteriorating? Is there enough gross profit in the business to cover your operating costs? Is there a positive gross margin on all your products?

Selling, General & Administrative (SG&A) to Sales

Definition: Percentage of selling, general and administrative costs to sales.

Formula:
$$\frac{\text{Selling, General \& Administrative Expenses}}{\text{Sales}}$$

Analysis: Look for a steady or decreasing percentage indicating that the company is controlling its overhead expenses.

Net Profit Margin

Definition: Shows how much profit comes from every dollar of sales.

Formula:
$$\frac{\text{Net Profit}}{\text{Total Sales}}$$

Analysis: Compare to other businesses in the same industry to see if your business is operating as profitably as it should be. Look at the trend from month to month. Is it staying the same? Improving? Deteriorating? Are you generating enough sales to leave an acceptable profit? Trend from month to month can show how well you are managing your operating or overhead costs.

Return on Equity

Definition: Determines the rate of return on your investment in the business. As an owner or shareholder this is one of the most important ratios as it shows the hard fact about the business -- are you making enough of a profit to compensate you for the risk of being in business?

Formula:
$$\frac{\text{Net Profit}}{\text{Equity}}$$

Analysis: Compare the return on equity to other investment alternatives, such as a savings account, stock or bond. Compare your ratio to other businesses in the same or similar industry.

Return on Assets

Definition: *Considered a measure of how effectively assets are used to generate a return. This ratio is not very useful for most businesses.*

Formula:
$$\frac{\text{Net Profit}}{\text{Total Assets}}$$

Analysis: ROA shows the amount of income for every dollar tied up in assets. Year to year trends may be an indicator... but watch out for changes in the total asset figure as you depreciate your assets (a decrease or increase in the denominator can affect the ratio and doesn't necessarily mean the business is improving or declining).

EFFICIENCY

Also called Asset Management ratios. Indicator of how efficiently the company manages its assets.

Days in Receivables

Definition: This calculation shows the average number of days it takes to collect your accounts receivable (number of days of sales in receivables).

Formula:
$$\frac{\text{Average Accounts Receivable}}{\text{Sales}} \times 360 \text{ days}$$

Analysis: Look for trends that indicate a change in your customers' payment habits. Compare the calculated days in receivables to your stated terms. Compare to industry standards. Review an Aging of Receivables and be familiar with your customers' payment habits and watch for any changes that might indicate a problem.

Accounts Receivable Turnover

Definition: Number of times that trade receivables turnover during the year.

Formula:
$$\frac{\text{Net Sales}}{\text{Average Accounts Receivable}}$$

Analysis: The higher the turnover, the shorter the time between sales and collecting cash. Compare to industry standards.

Days in Inventory

Definition: This calculation shows the average number of days it will take to sell your inventory (number of days sales @ cost in inventory).

Formula:
$$\frac{\text{Average Inventory}}{\text{Cost of Goods Sold}} \times 360 \text{ days}$$

Analysis: Look for trends that indicate a change in your inventory levels. Compare the calculated days in inventory to your inventory cycle. (Learn how to calculate your inventory cycle in our lesson on Using Financial Statements). Compare to industry standards.

Inventory Turnover

Definition: Number of times that you turn over (or sell) inventory during the year.

Formula:
$$\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

Analysis: Generally, a high inventory turnover is an indicator of good inventory management. But a high ratio can also mean there is a shortage of inventory. A low turnover may indicate overstocking, or obsolete inventory. Compare to industry standards.

Sales to Total Assets

Definition: Indicates how efficiently your business generates sales on each dollar of assets.

Formula:
$$\frac{\text{Sales}}{\text{Total Assets}}$$

Analysis: A volume indicator that can be used to measure efficiency of your business from year to year.

Days in Accounts Payable

Definition: *This calculation shows the average length of time your trade payables are outstanding before they are paid. (number of days sales @ cost in payables).*

Formula:
$$\frac{\text{Average Accounts Payable}}{\text{COGS}} \times 360 \text{ days}$$

Analysis: Look for trends that indicate a change in your payment habits. Compare the calculated days in payables to the terms offered by your suppliers. Compare to industry standards. Review an Aging of Payables and be familiar with the terms offered by your suppliers.

Accounts Payable Turnover

Definition: The number of times trade payables turnover during the year.

Formula:
$$\frac{\text{COGS}}{\text{Average Accounts Payable}}$$

Analysis: The higher the turnover, the shorter the time between purchase and payment. A low turnover may indicate that there is a shortage of cash to pay your bills or some other reason for a delay in payment.