FIVE MEASURES OF FINANCIAL EFFICIENCY
What does it mean to be financially efficient? Companies with a high degree of financial efficiency require fewer assets, reducing the use of cash and limiting borrowing needs. Being financially efficient also means releasing cash quickly from inventory and through collections of accounts receivable, creating repayment sources that enhance creditworthiness.

**FIVE MEASURES ASSESS FINANCIAL EFFICIENCY**

1. Total asset turnover.
2. Net fixed assets turnover.
3. Accounts receivable days, also called average collection period.
4. Inventory days on hand.
5. Accounts payable days, also called average payment period.

**TOTAL ASSET TURNOVER**

The total asset turnover ratio looks at the relationship of annual net sales to total assets. The total asset turnover is calculated as net sales divided by total assets. This ratio answers the question: How many dollars of sales did the company generate from each dollar of assets? Generally, the higher the ratio, the better, because a high ratio suggests a company is making efficient use of its assets.

But there are some cautions you should consider. Asset turnover varies significantly by industry and industry segment. Manufacturers are typically asset-heavy and have lower total-asset turnovers than most retailers, wholesalers, and service companies. If a company has an abnormally high asset turnover, it may result from several causes. It may mean the company is close to needing additional assets, it depreciates assets faster than the industry average, or it uses an inventory accounting method that understates inventory in relation to the industry. The total asset turnover is often the most stable of the five efficiency ratios, but it can mask efficiency problems in specific asset categories.
Another financial efficiency measure evaluates how well a company uses fixed assets such as plant and equipment. The net fixed assets turnover (or NFA turnover) compares a company’s net fixed assets with its net sales. The NFA turnover ratio is calculated as sales divided by net fixed assets. This ratio answers the question: How many dollars of sales did the company generate from each dollar of its fixed assets?

When using the NFA turnover in an internal analysis note that as with the total asset turnover, an abnormally high NFA turnover can mean the company may soon need to invest in plant and equipment. A low turnover can mean that the company recently added capacity or is experiencing a sales decline and may need to divest some assets. It’s normal for the NFA turnover to be less stable than the total assets turnover. This ratio trend line looks a little like stair steps as management alternately acquires fixed assets to permit sales growth and then builds sales to take advantage of its new capacity.

Turnover ratios are useful in discovering borrowing causes and repayment sources and in evaluating management actions, because turnover ratios measure a company’s need for assets in relation to its sales. However, turnover ratios have several limitations:

- Turnover ratios aren’t as useful in analyzing service companies and other companies that have low asset investments.
- Turnover ratios can mask seasonal fluctuations in sales or asset levels. The balance sheet measures a point in time, and its year-end measures may or may not be comparable to typical values during the year. Keep in mind that the balance sheet includes assets that were acquired at different times and at different costs.
- Turnover ratios don’t distinguish between assets of good or poor quality. It is always important to perform a quality assessment prior to applying analytical measures such as turnover analysis.
ACCOUNTS RECEIVABLE DAYS

Analysts interpret accounts receivable efficiency in terms of the number of days sales are outstanding in receivables. This measure is the average length of time it takes a company to collect from its customers on credit sales. It's the number of days a company's sales are tied up in accounts receivable. The accounts receivable days is calculated by multiplying accounts receivable by 365, and then dividing that result by the company's net sales for the year.

As an average, however, the measure has some analysis limitations. It doesn’t measure exactly how many days it takes to collect each account receivable or how long each account has been outstanding. Also, the collection speed might vary during the year.

As a measure, accounts receivable days operates on two assumptions. The first assumption is that all sales are credit sales. That’s a safe assumption for manufacturers, wholesalers, and many service businesses that sell to other companies. However, retailers and service businesses selling to the public have mostly cash and credit-card sales that don’t generate receivables. It’s best to recalculate these companies’ average collection period using just credit sales.

The second assumption is that sales and receivables are level throughout the year. The assumption is accurate for companies without seasonal sales, but a seasonal company’s year-end collection period is not typical of other times during the year. Fortunately, there are some ways to compensate for seasonal distortion: obtain quarter-end receivables and either average them to calculate an annual ratio, or compute accounts receivable days separately for each quarter.

AFTER CALCULATING A COMPANY’S RECEIVABLE DAYS, COMPLETE YOUR ANALYSIS IN TWO STEPS

1. Compare the average collection period with the company’s normal credit terms to see if, on average, customers are paying within terms.

2. Evaluate the effects of returns, allowances, and charge-offs. An improvement in receivable days can mean customers are paying faster, but it can also reflect a large returned item, a rebate, or a charge-off in excess of the allowance for bad debts.
INVENTORY DAYS ON HAND

As a measure, inventory days on hand gives us a sense of how much company cash is tied up in products waiting to be sold. The ratio is calculated by multiplying inventory times 365 and then dividing the product by cost of goods sold (COGS) for the year. The inventory days on hand measure answers the question: On average, how many days’ supply of inventory did the company maintain?

Using COGS instead of net sales in the measure focuses the analysis on resources actually tied up in the inventory. For retailers and distributors, those resources are usually just cash paid for products to be resold. For manufacturers, inventory includes not only raw materials purchased, but also capitalized costs such as direct and indirect labor and depreciation of manufacturing equipment.

ACCOUNTS PAYABLE DAYS

Analysts calculate the average payment period known as accounts payable days to estimate how quickly a company pays its suppliers. Accounts payable days can change because a company pays bills more promptly or less promptly. It can also change because suppliers shorten or extend trade credit terms. Change for either reason affects a company’s cash requirement and is important to measure.

Accounts payable days is calculated based on the type of company. Retailers and wholesalers use a

TIPS FOR ANALYZING INVENTORY DAYS ON HAND

ANALYSIS 1

Watch for unusual year-end inventory values. Many companies choose a year-end at a low point in the inventory cycle, to reduce certain taxes. Seasonal or periodic high-volume purchases cause inventory to vary during the year. To compensate for inventory fluctuations, compute average quarterly or monthly inventory values to use in your ratio calculation.

ANALYSIS 2

Remember, not all inventory components turn over at the same speed. If only some of a company’s products are seasonal, you can ask for inventory and sales figures by product line and calculate days on hand for individual sales segments. When analyzing a manufacturer, ask if there were any changes in the mix of raw materials, work in process, and finished goods.

ANALYSIS 3

Find out the company’s inventory accounting method, which may help explain days-on-hand fluctuations. For example, a manufacturer of toy soldiers uses the LIFO method. Last year, petroleum-based resin prices were steady but this year prices fell, leaving older, higher resin costs in inventory. Ending inventory value for this year is high, so the company’s inventory days on hand will be high compared to the prior year.
different formula than manufacturers. They create accounts payable when they purchase goods for resale, and those purchases largely equate to their cost of goods sold. To calculate accounts payable days for retailers and wholesalers, multiply accounts payable by 365 and then divide the result by cost of goods sold.

A manufacturer’s accounts payable come from purchasing raw materials, but those purchases are only one of several components of their cost of goods sold. Manufacturers’ cost of goods sold also includes depreciation, labor, and other costs. To calculate accounts payable days for manufacturers, multiply accounts payable by 365 and then divide the result by purchases.

When analyzing a manufacturer, you may need to ask the company for its purchases figures, and you will probably need to perform the purchases-based calculation manually. Most automated spreadsheet programs use only COGS in the calculation.

TIPS TO HELP YOU ANALYZE ACCOUNTS PAYABLE EFFICIENCY

- Use quarterly or monthly averages to compensate for accounts payable values that fluctuate during the year. Merchandise and raw materials purchases follow inventory patterns when a company has seasonal sales. Periodic special terms offered by suppliers can also cause large swings in accounts payable.

- Check for changes in use of bank lines of credit. Using a bank line to pay suppliers can lower cost of goods sold by enabling a company to take prompt-payment discounts. Most lines have 30-day clearance requirements, so payable days can increase temporarily.

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