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Leases and contract revenue

Get ready to roll out the new accounting standards

Two major accounting rule changes will soon go into effect — and they're expected to have major impacts on how many manufacturers and distributors report their financial results. Here are the details, including what's changing, when the changes must be implemented and how they'll affect financial statements.

A new lease on leases

Of the two updates discussed here, the changes to lease accounting are much more straightforward. In fact, the Financial Accounting Standards Board (FASB) didn't even assemble a transition resource group to help companies implement the updated lease guidance.

In a nutshell, Accounting Standards Update (ASU) No. 2016-02, *Leases*, requires operating leases with terms longer than a year to appear on the lessee's balance sheet. As a result, manufacturers and distributors will report leased warehouse

space, vehicles, equipment and other property as right-to-use assets, along with the rent they owe as liabilities.

The existing lease accounting rules in U.S. Generally Accepted Accounting Principles (GAAP) require companies to record lease obligations on their balance sheets only when the arrangements are similar to financing transactions, such as rent-to-own contracts for buildings or vehicles. So, operating leases are *not* reported on the balance sheet under existing GAAP.

This fundamental change in financial reporting will make lessees appear more leveraged than they did in the past — even if the company's day-to-day operations haven't changed. In some cases, the new standards will cause companies to violate loan covenants, requiring them to obtain waivers from lenders or renegotiate financing terms to reflect higher debt ratios.



For public companies, the updated lease accounting standard goes live in 2019. Private companies have an extra year to comply. Companies that issue comparative statements will need to start collecting data to implement the changes well in advance of these deadlines, however.

Major changes to the income statement

The changes to revenue recognition under ASU 2014-09, *Revenue from Contracts with Customers*, are

far more complicated than the updated lease guidance. The new revenue recognition update replaces about 180 pieces of industry-specific guidance in GAAP with a broad, principles-based method for most businesses to recognize revenue. (See “5 steps to recognize revenue” at right.) This new approach to revenue recognition is more closely aligned with international financial reporting rules.

The changes will be significant, especially for manufacturers and distributors that enter into specialized, long-term contracts with customers. For some companies, the updated guidance will result in earlier revenue recognition than in current practice. This is because the new standard will require companies to estimate the effects of sales incentives, discounts and warranties. The new standard also provides guidance on service revenue and contract modifications.

Nearly all manufacturers and distributors will need to beef up their footnote disclosures under the new rules. The update requires detailed breakdowns of revenue by product lines, geographic markets, contract length, services and physical goods.

The revenue recognition guidance goes into effect a year *before* the lease standard: It’s effective for public companies in 2018 and private companies in 2019. Last December, the Securities and Exchange Commission estimated that 22% of companies hadn’t started implementing the revenue recognition standard guidance — and that statistic is likely higher among private firms.

Proactive manufacturers that have started the implementation process forewarn of the challenges. Last November, Christine DiFabio, assistant controller at Zoetis, a manufacturer of animal medicines, said during a panel discussion at Financial Executives International’s Current Financial Reporting Issues Conference, “For those people who haven’t started or are very early [along], try to start to speed it up, because while you may not think it will have a significant impact

5 steps to recognize revenue

Accounting Standards Update (ASU) No. 2014-09 will require companies to follow five steps when deciding how and when to recognize revenue:

1. Identify a contract with a customer.
2. Separate the contract’s commitments.
3. Determine the transaction price.
4. Allocate a price to each promise.
5. Recognize revenue when or as the company transfers the promised good or service to the customer, depending on the type of contract.

The updated guidance will require companies to exercise more judgment when recognizing revenue than do the existing rules. An accounting professional can help you make informed judgment calls based on the terms of your customer contracts.

financially, it’s a significant impact in workload — and documentation efforts as well.” She described the accounting change as “all encompassing.”

Michael Cleary, Boeing vice president of accounting and financial reporting, also acknowledged during the panel discussion that the changes under ASU 2014-09 would significantly alter when his company records revenue. Boeing’s customer contracts are typically long-term and complicated, so he formed a steering team, including officials from the communications and human resource departments, tasked solely with implementing the new standard.

Need help?

With the implementation deadlines for the updated lease and revenue recognition standards fast approaching, it’s time to review your contracts. That’s the first step in implementing the changes. The next step is to contact your CPA to understand how the changes will affect your company’s financial statements in the future. ■

How to reduce waste

Scrap materials sometimes pile up on the shop floor, especially when a plant ramps up production to meet peaks in demand. Excess scrap can lead to safety issues and cleanup costs — but waste extends beyond trash in a manufacturing context. Here’s an expanded definition of “waste” and some cost-effective ways to help reduce it.

Waste redefined

Profitable manufacturers make as many products with as few resources as possible. Efficient production starts with waste reduction efforts that focus on:

- ▶ Scrap (leftovers from the production process),
- ▶ Energy consumption,
- ▶ Defects,
- ▶ Motion,
- ▶ Transport,
- ▶ Queue time, and
- ▶ Inventory.



Preventive maintenance, routine physical inspections and effective quality control are the keys to operational efficiency. For example, do you conduct ongoing maintenance on equipment? Doing so can ensure that each machine is properly calibrated and running smoothly. Maintenance schedules can prevent unexpected breakdowns and leaks that drain electricity, gas, oil, coolants and so on.

Another part of preventive maintenance is replacing equipment on a regular basis. No machine lasts forever. New equipment can help speed up production, minimize defects and lower energy costs.

More creative solutions

On the first workday of the month, get into the habit of walking the plant floor and pausing to observe the production process. Look for such issues as how much time machines and employees sit idle and whether work flow seems to be organized. Revising the flow to be more linear and moving raw materials closer to the production line are simple ways to minimize idle time and transport.

Also pay attention to whether locations are clearly delineated. You may occasionally need to update signage or repaint lines on the floor to

help employees function more efficiently. Likewise, look for broken, dusty or expired inventory items. Slow-moving inventory is a waste of working capital.

Every manufacturer needs quality inspections to detect waste and prevent defects from recurring. Always look for the underlying *cause* of quality issues and fix it. For example, link defects to a specific employee (who may simply need

better training) or a machine (that may need to be repaired or replaced). Also consider recycling opportunities. To illustrate, you may reuse rinse water in the cooling system. Or metal scrap can be melted and returned to raw materials — or sold to a recycling yard — rather than thrown in the trash.

The bottom line

Company outsiders can offer fresh perspectives on waste reduction. One source of practical, objective input is your CPA. He or she has seen the best (and worst) practices from other manufacturers and can offer ideas to boost your bottom line. ■

Combining liquidity and efficiency metrics

Cash conversion cycle can be a useful management tool

How long does it take your company to convert raw materials to cash collected from customers? The cash conversion cycle is a financial metric that answers this critical question. Here's a closer look into how it's calculated and what it means.

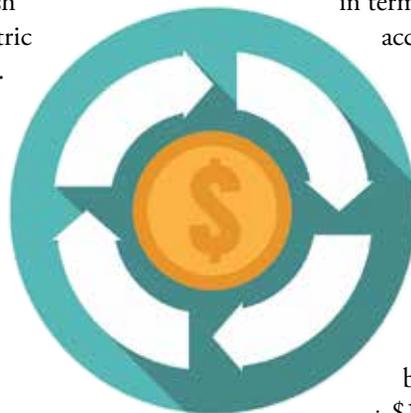
Liquidity vs. turnover

Liquidity ratios tell whether the company's current assets are sufficient to cover current liabilities. For example, the current ratio simply compares all current assets and current liabilities. A current ratio below 1 is a red flag that the company may experience cash shortfalls over the coming year.

The more conservative "quick" ratio typically compares only the most liquid current assets (cash, marketable securities and trade receivables) to current liabilities. The optimal level of liquidity varies from industry to industry.

On the other hand, turnover ratios assess how efficiently the company's resources are being used.

These may be computed in terms of the times that the account would turn over in a year — or in terms of the number of days in the account's operating cycle.



For example, suppose a manufacturer has annual sales of \$10 million and an average accounts receivable balance of \$1 million. The hypothetical company's accounts receivable would turn over 10 times per year ($\$10 \text{ million} \div \1 million) or be collected in 36.5 days ($\$1 \text{ million} \div \$10 \text{ million} \times 365 \text{ days}$). Turnover ratios can also be computed by comparing annual purchases to average inventory or payables.

In general, there's a trade-off between liquidity and turnover. Companies that are sitting on excessive stockpiles of cash, receivables and inventory may be a safe bet for lenders — but they may not be managing their resources as efficiently as possible. Manufacturers strive to operate "lean," meaning they generate as much revenue from as few resources as possible.

Best of both worlds

Liquidity ratios also tend to treat all current assets the same as cash, even though receivables and inventories aren't immediately available to pay off debt. An alternative ratio — known as the cash conversion cycle — accounts for how long it takes to convert current assets to cash and pay off current liabilities. The formula for calculating the cash conversion cycle is a function of three turnover ratios:

$$\text{Cash Conversion Cycle} = \text{Days in Inventory} + \text{Days in Receivables} - \text{Days in Payables}$$

Returning to the example, suppose the company maintains 90 days in inventory and pays suppliers in 32.5 days. Its cash conversion cycle would be 94 days (90 days in inventory + 36.5 days in receivables – 32.5 days in payables).

The cash conversion cycle evaluates both liquidity and turnover. A *positive* result indicates the number of days a company must borrow or tie up capital while awaiting payment from customers. A *negative* result represents the number of days a company has received cash from customers before it must pay its suppliers. You typically want your company's cash conversion cycle to be as low as possible.

Comprehensive insight

Manufacturing is an asset-intensive industry. Balance sheet metrics, such as liquidity and turnover ratios, can help management understand a company's financial position. But no ratio works in isolation. The cash conversion cycle is a robust tool that, when combined with leverage, growth and profitability metrics, can help predict where the company is heading. ■

Spotlight on the research credit

After being continually renewed since the 1980s, the research credit was finally made permanent under the Protecting Americans from Tax Hikes (PATH) Act. This change allows manufacturers to plan (with certainty) for their R&D expenditures. And it's expected to survive any tax reform legislation that will pass in 2017.

Here's an overview of the current rules on how to claim credits for R&D spending, including how the break has been expanded for certain small manufacturers.

What costs qualify?

If your company commits resources to developing new manufacturing techniques, improving processes, experimenting with alternative materials

or devising other innovations, it may be eligible for the research credit. Generally, to qualify for the credit, a research activity must:

- ▶ Relate to development or improvement of a "business component," such as a product, process, technique or software program,
- ▶ Strive to eliminate uncertainty over how (and whether) the business component can be developed or improved,
- ▶ Involve a "process of experimentation," using techniques such as modeling, simulation or systematic trial and error, and
- ▶ Be technological in nature — that is, it must rely on "hard science," such as engineering, computer science, physics, chemistry or biology.



To claim the credit, you must bear the financial risk associated with the research *and* enjoy substantial rights to the results. Otherwise, it will be considered “funded research,” which is ineligible for the credit.

What are the benefits?

The tax benefits of the research credit are significant: a dollar-for-dollar, nonrefundable credit of up to 6.5% of qualified research expenditures (QREs). QREs include wages and supplies related to qualified research activities, computing costs and 65% of contracted outside research fees. “Nonrefundable” means the credit can’t exceed your tax liability for the year. So you can’t use it to generate a loss and claim a refund. But unused research credits may be carried back one year or forward up to 20 years to offset your tax liability in those years.

It’s important to understand that simply conducting research isn’t enough to qualify for the credit. Rather, it’s designed as an incentive for companies to *increase* their research activities. Calculating the credit is complex, and there are several methods for doing so, but, essentially, it’s equal to a percentage of the amount by which your current-year QREs exceed a base amount.

Companies that can’t establish their historical fixed base percentage, as well as those with an exceptionally high base percentage, may elect to use an alternative simplified method to calculate the research credit. Here, the fixed base is 50% of the average research expenses incurred in the previous three years, and the credit is 14% of the excess. For

example, if a manufacturer averaged \$200,000 per year of qualified expenses over the last three years, the credit would be \$14,000 (14% of \$100,000) even if its research activities didn’t increase.

What’s new?

The PATH Act made two important changes that expand the benefits of the research credit for smaller businesses. First, beginning in 2016, the act allows those with average gross receipts for the previous three years of \$50 million or less to claim the credit against the AMT. This is good news for taxpayers, particularly owners of partnerships and S corporations, whose ability to use the credit is limited or eliminated by the AMT.

The tax benefits of the research credit are significant: a dollar-for-dollar, nonrefundable credit of up to 6.5% of qualified research expenditures (QREs).

Second, also beginning in 2016, start-ups — generally, companies in operation for less than five years with less than \$5 million in gross receipts — may use the research credit to offset up to \$250,000 in employer-paid FICA taxes. This is a big advantage for companies that incur substantial research expenditures but can’t otherwise use the credit because they’re not yet generating any taxable income.

Need help?

While the research credit can be a valuable tax break for innovative manufacturers, claiming it requires complex calculations, detailed record-keeping and an in-depth understanding of the nuances of the tax rules. Your tax advisor can help calculate this break and minimize unwanted attention from the IRS. ■

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