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CFO: A MOST DANGEROUS JOB

CONNECTING THE SUPPLY CHAIN

BANKS FIGHT "OVERREGULATION"

Misleading Metrics?

Do non-GAAP earnings numbers deceive or aid investors?

FEATURES

December 2016
Volume 32, No. 10

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Clockwise from top right: Thinkstock (5)

FROM THE EDITOR

Post-Factual Earnings

››Welcome to the post-truth (or post-factual) era. In politics, Wikipedia says, it means “debate is determined largely by appeals to emotion disconnected from the details of policy, and by the repeated assertion of talking points to which factual rebuttals are ignored.” ¶ In finance and business, post-truth creeps in at times. A fictional investment fund publishes a press release saying it made a bid for a large tech company. A noted high-tech firm attributes a cyber-attack to a murky hacker group purportedly financed by the Russian government (and presents no hard evidence to substantiate the claim).

Fortunately, however, finance has a lot less fake news than politics. There aren’t many ad-hominem attacks on earnings calls, either. Perhaps that’s because there is a version of the truth that is largely indubitable: earnings numbers governed by Generally Accepted Accounting Principles.

The importance of GAAP is enormous: How fast would the U.S. capital markets break down if investors thought all companies were fudging their numbers—that the line items on an income statement couldn’t be trusted?

Which brings us to the reason why the debate over non-GAAP metrics matters so much. As Deputy Editor David McCann explores in the cover story, the proliferation of non-GAAP metrics (particularly in earnings reports) and their increasing prominence have the SEC alarmed. Rightfully so.

Non-GAAP measures, for sure, help paint a fuller picture of a company. But they can be overused. If every earnings number is “adjusted” and net income is buried in the ninth paragraph of the press release, the metrics that are truly comparable across companies get watered down.

Politicians can survive even when voters are highly skeptical of their public pronouncements; publicly held companies that tap U.S. capital markets, not so much.

Vincent Ryan
Editor-in-Chief

Mark Bennington

EDITOR’S PICKS

FINANCE

An annual rite of spring, the CFO Rising East Summit, takes place in Boston on March 8-9, 2017. This year’s theme is “Leading the path to financial growth.” Speakers include the finance chiefs of Siemens, GameStop, Voya, Shazam, and Chemours. For more information, go to: https://theinnovationenterprise.com/summits/cfo-rising-east-summit-boston-2017.

STRATEGY

In “The Comprehensive Business Case for Sustainability,” on the Harvard Business Review website, authors Tensie Whalen and Carly Fink take on some of the best objections to sustainability efforts and demonstrate why those arguments don’t hold water. Read the article at https://hbr.org/2016/10/the-comprehensive-business-case-for-sustainability.

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Insight leads to opportunity.
Opportunity leads Silicon Valley to Ohio.
Saama is smart. Which is why they're expanding in Ohio.
Saama, the Silicon Valley-based leader in mining data-driven insights, needs talent and thriving business ecosystems to succeed. Which is exactly what they discovered in Ohio. But don't take our word for it.
Take theirs.
See why Saama chose Ohio at jobs-ohio.com/Saama
Welcome to Ohio. It's on.
Ohio
Tech pioneer Ken Coleman, Saama Chairman

Miscellaneous missives from the mailbag:

"I'm seeing support for the conclusion that companies engaging in financial reporting violations make broad-based stock grants to encourage employees to remain silent about violations," wrote Bruce Brumberg, editor of myStockOptions.com, in response to **"Stock Options Help Firms Keep Workers Quiet"** (Oct. 21).

"There appears to be a correlation, but I'm not seeing the causation," Brumberg continued. "There are other possible reasons for these findings. For example, **companies may be using grants as a recruitment, retention, and motivation tool** and thus need to make larger grants compared to competitors and during this time period. ... Studies show the beneficial effect of grants to rank-and-file employees."

THE BUZZ ON CFO.COM

Commenting on **"Internal Auditors Strain Under Unethical Pressures"** (Nov. 2), a disgruntled reader offered, "Unfortunately this is a reality, and the Institute of Internal Auditors does not actively rally or support a fallen internal auditor. They stay away when a chief audit executive pays a price for standing his ground."

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1. Paid/requested outside-county mail subscriptions stated on Form 3541	97,050	97,679
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Katie Brennan, SVP, Sales

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ARGYLE

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STATS OF THE MONTH

FINAL OFFERS

$4.9 billion
Q4 2016 proceeds raised from IPOs

22
Number of IPO pricings in Q4 2016, down from 30 one year ago

-48%
Year-to-date decrease in the number of IPO filings

$17.3 billion
Year-to-date IPO proceeds raised, down 41% from 2015

Note: All data as of November 18
Source: Renaissance Capital's IPO Center

Topline

TAX

Treasury Scales Back Anti-Inversion Rule

Final rule on 'earnings stripping' includes exemptions that amount to a drastic reduction in the scope of the proposed measures.

Many kinds of U.S. multinational companies (MNCs), including S-corporations and banks, apparently dodged a bullet in October when the U.S. Treasury Department issued its final, substantially revised rules aimed at curtailing "earnings stripping."

The revised regulations represent an attempt by Treasury to help "narrow the rule and avoid any unintended consequences" of previously proposed regulations, said U.S. Treasury Secretary Jacob Lew, noting that the department "heard from many U.S. companies that the proposed rules could unduly constrain ordinary business practices." The final rules zeroed in on the practice of earnings stripping, particularly as a tax-avoidance method following a corporate inversion.

In a typical earnings stripping maneuver, a U.S. company, which by means of a tax inversion has become a subsidiary of a foreign-based parent company, issues a note or bond to the foreign parent company. The U.S. parent company then pays interest to the foreign company.

In many such transactions, even though they make the interest payments, the U.S.-based subsidiaries receive none of the borrowed money from the parent companies. Up until the new rules, however, the U.S.-based companies could deduct the interest payments from their taxable income.

The new Treasury regulations, however, curb "the ability of corporations to engage in earnings stripping by treating financial instruments that taxpayers purport to be debt as equity in certain circumstances," according to a Treasury press release. In changing the characterization from a loan to a stock transaction, the interest payments are deemed dividend payments, and hence don't gain the tax deduction for interest payments.

The final rules, like the proposed ones, don't stop at inversions, however. "The ability to minimize income tax liabilities through the issuance of related-party financial instruments is not, however, limited to the cross-border context, so these rules also apply to related U.S. affiliates of a [U.S.-based] corporate group," according to Treasury.

But by creating a number of significant exemptions to restrictions on U.S.-based multinationals, the new rules probably eased what had been the considerable anxiety among a broad swath of them that the proposed rules had gone too far. "As proposed, it had a huge footprint and probably affected U.S. MNCs more than it did foreign MNCs, including ones created by inversions," says Ronald Dabrowski, a principal in the Washington national tax practice of KPMG.


Jacob Lew

Dabrowski says the final rule "probably is going back to targeting better what it was intended to target all along, and that is for MNCs using debt to reduce the U.S. tax base. So these rules are all about how multinational groups use their free cash and their intercompany debt."

What they aren't about, Treasury made clear, is the issuance of debt by non-U.S. MNCs. "The foreign issuer exception—which exempts any debt issued by a foreign corporation from the regulations—is the headline improvement" of the new rules over the proposed ones, according to Dabrowski. "That change addresses the major concerns for most U.S. MNCs, including with respect to cash pooling, and also reduces the complexity for non-U.S. MNCs."

The new rules exempt cash pools and short-term loans from the debt strictures in the proposed regulation. "Cash pooling is a major, entrenched cash-management tool for MNCs and generally involves, in the context of offshore subsidiaries getting together and entering into a pooling arrangement, an effective use of free cash-flow," Dabrowski says.

Besides cash pooling, the final rules provide "limited exemptions for certain entities where the risk of earnings stripping is low," including transactions among S-corps. Many financial institutions and insurance companies are also excluded from certain aspects of the rules. **DAVID M. KATZ**

TECHNOLOGY

2017's Priority: Better Analysis

As CFOs transform from backroom accountants into boardroom advisers, they say improving reporting and analysis functions is a top objective for 2017, according to a survey by consulting firm Kaufman Hall.

More than 70% of the 380 finance executives polled in October 2016 say supporting decision-making is their number-one goal for next year, and more than 90% say they need to do more with the financial and operations data at hand to help top management make critical decisions.

"CFOs want to make a bigger impact on operations across the board," says Abe Cohen, vice president of marketing at Kaufman Hall. "The data is supporting the notion that CFOs are transforming into business advisers."

CFOs' top objectives have historically been perennial challenges like consolidating finances and containing costs, he says. Now, the CFOs surveyed say they are looking for ways to access data from across the organization. The overwhelming majority of that data is management- and operational-level information (75% and 67%, respectively). Just under half of respondents say accessing benchmarking data is also high on their agenda.

Producing actionable information from raw data may be easier said than done, however. Less than 1 in 10 respondents say they are "very satisfied" with performance management reporting at their companies.

Organizations' lack of agility appears to be a worry. Less than 23% of respondents are very confident about their company's ability to maneuver past unforeseen business obstacles, due in part to outdated financial planning and analysis (FP&A) tools and processes.

"Organizations spend too much time every year going through the 'annual budgeting process,'" Cohen says.

The length of budget cycles, inefficient reporting and data access, and general problems caused by an overreliance on Excel are the primary challenges facing the FP&A function. More than 50% of the Kaufman Hall survey respondents say they take longer than three months to complete a budget. "A lot can change in a quarter," says Cohen.

But the move to rolling forecasts has addressed some of the problems. Thirty-eight percent of respondents say their company now uses rolling forecasts, up from 33% at this same time last year and 25% in 2014.

The 2016 Performance Management survey polled finance executives in financial, health-care, and higher education institutions. **SEAN ALLOCCA**

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AUDITING

Internal Auditors Pressured

Almost a quarter of all internal auditors experience pressure to change or suppress unfavorable audit findings, but the true prevalence of such pressure might be far greater.

In a new report from the Internal Audit Foundation, based on a survey of more than 14,500 audit professionals from 166 countries, 23% of respondents say that "yes," they've been directed to suppress or significantly modify an internal audit finding that they believed to be valid.

However, an additional 11% of participants chose a "prefer not to answer" response option. When combined, those two response groups create a "pressure score" of 34%, writes the report's author, Larry Rittenberg, a University of Wisconsin professor and the audit committee chairman for Woodward Inc.

Not surprisingly, most often the pressure put on chief audit executives (CAEs) comes from a senior management executive. Among CAEs who report feeling pressure, 87% point to the CEO, CFO, a top operations officer, or a combination of them, as the source of pressure.

Perhaps more surprising is that almost one in five (18%) of these pressured CAEs says the board of directors or audit committee has leaned on them.

"Internal auditors do not always operate in environments that foster ethical approaches, and many organizations do not have codes of conduct or codes of ethics to support them," says Richard Chambers, president of the Institute of Internal Auditors.

Generally, those who feel pressured in the workplace to carry out actions they disagree with are concerned about potential repercussions should they resist. And those concerns are valid, according to Rittenberg.

"There may be consequences to resisting pressure to change audit findings, which may include pay cuts; transfers to other positions; terminations or being eased into retirement; budget cuts; exclusion from important meetings; and being ostracized by individuals." **S.A., DAVID McCANN**

CYBERSECURITY

The Corporatization of Cyber Crime

Talk about white-collar criminals. The idea of cyber criminals being scruffy hackers performing their dark deeds in a basement is no longer the most accurate. More typical are rows of clean-cut employees working regular hours, doing their jobs as part of a large commercial enterprise that might resemble the one you're working for right now.

"Cyber crimes have become much more professionalized over the last five years," says Steve Meckl, director of Americas incident response for the cybersecurity services team at Symantec. "Whereas before they were small cells of people trying to monetize attacks, now they are professional organizations akin to companies."

While they're at the office, these employees work with off-the-shelf ransomware and have 24/7 call centers to provide them with technical help, according to Meckl, who spoke during a panel on cyber extortion in October at the Cyber Risk Insights Conference held by Advisen.

Like conventional corporations, these cybercrime enterprises allocate capital to respond to their own set of market forces. "Right now, the market for crypto ransomware [software that encrypts files until a ransom is paid to unlock them] is really hot, so a lot of these enterprises are investing in it," says the Symantec executive.

This new emphasis on market forces "is changing the game in terms of responding, because you're no longer dealing with individuals," he adds. "Now you're dealing with organizations that are behaving more like businesses."

And the bigger the criminal enterprise, the scarier it is for the company victimized by the attack. Asked which kind of illegal organization most frightens him, Austin Berglas, a senior managing director and head of cyber defense for K2 Intelligence, answers that it is "nation states, because they have the most time and the most resources behind them." **D.M.K.**

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BENEFITS

Health-Care Cost Increases Slow

The rate of growth in employers' medical costs averaged just 2.4% in 2016, according to Mercer. That was the second-lowest figure since 1997 in the consulting firm's annual National Survey of Employer-Sponsored Plans, which this year included 2,544 participants.

The result continued a long period of declining growth rates. After peaking at 14.7% in 2002, the rate has dipped most years since. The 2015 figure was 3.8%.

Mercer attributed much of the improvement to continued increasing enrollment in consumer-directed health plans (CDHPs), which in 2016 accounted for 29% of all covered workers, up from 25% last year. CDHPs generally are accompanied by higher deductibles for employees, which are supposed to encourage them to shop more carefully for health-care services.

Among large employers (at least 500 employees), coverage in a CDHP that is eligible for a health savings plan (HSP) cost 22% less, on average, than coverage in a traditional preferred provider organization (PPO) plan. Among "jumbo" employers (20,000 or more employees), 80% offered a CDHP this year, and enrollment jumped from 29% to 40% of covered employees.

Despite the lower cost of a CDHP, most employers continue to offer it as a choice rather than as the only available plan. Among large employers (those with at least 500 employees), 61% offered a CDHP in 2016, but for only 9% was it the sole option.

At the same time, Mercer notes, employers have been taking steps to mitigate employees' growing financial risk by making available telemedicine and other less-expensive kinds of care.

Meanwhile, despite the mere 2.4% growth rate for health costs this year, survey respondents forecast that the rate will tick back up to 4.1% in 2017. However, in recent years employers have tended to overestimate the amount they will spend in the following year, according to Beth Umland, a Mercer director. D.M.

CREDIT

Is the U.S. Headed for a Downgrade?

Donald Trump's presidential election victory doesn't pose an immediate threat to the United States' pristine debt rating, but the impact of the Trump's fiscal policies would be negative over the medium term, according to Fitch Ratings.

The credit ratings agency says the country's "AAA" rating is "underpinned by unparalleled financing flexibility and a large, rich and diverse economy." But "there are uncertainties about the detail of Trump's [fiscal] program, the degree to which he will seek to carry it out, and his capacity to implement it."

Further, Trump's tax cut proposal, Fitch says in a mid-November news release, "would be negative for U.S. sovereign creditworthiness over the medium term, as tax cuts alone cannot generate enough growth to make up for the loss in revenue."

Fitch casts doubt on "trickle-down" economic theory, warning, "It is uncertain whether corporates would boost investment in response to a tax cut as investment growth has been slow despite strong profitability and a recent boom in corporate borrowing."

Tax cuts would increase household disposable income but, according to Fitch, such an increase "would also likely spur inflation or external imbalances over the medium term, as the gap between actual and potential economic output [in the U.S.] has virtually closed."

In addition, the ratio of U.S. government debt to GDP would rise "dramatically" were the tax cuts to be implemented in full.

The Urban-Brookings Tax Policy Center estimates the net loss of revenue from Trump's planned cuts at $6.2 trillion, one-third of 2016 GDP.

As far as Trump's other proposals, Fitch warns that a major shift toward trade protectionism "would have significant adverse implications for U.S. investment and growth and push up prices." **MATTHEW HELLER**

GOVERNANCE

Boards Focused on Cybersecurity

Corporate directors are spending more time discussing cybersecurity issues and more money to mitigate cyber risks than a year ago, but they are still reluctant to go public with information about attacks.

Almost three quarters (74%) of 160 public-company directors say their boards are now more involved with cybersecurity than they were last year, and 80% have expanded their cybersecurity budgets, by an average of 22%, according to a September survey by BDO USA.

"Corporate directors are being briefed more often and are responding with increased budgets to address this critical area," says Shahryar Shaghaghi, BDO's national leader of technology services.

While boards are becoming more cognizant of cyber risk, however, they are still shying away from sharing critical information externally after an attack. Only 27% of directors say they do so, even though "sharing information gleaned from cyber attacks is a key to defeating hackers," says Shaghaghi.

The consolation is that, despite the reluctance to disclose information, more boards have their companies prepared to deal with an attack. Almost two thirds of directors (63%) say their companies have a cyber-breach response plan in place, up from 45% in 2015.

Overall, however, the corporate community has a long way to go in shoring up cyber defenses. "The survey reveals significant vulnerabilities," says Shaghaghi. "Less than half of board members report they have both identified and developed solutions to protect their critical digital assets." **S.A.**

Cybersecurity on the Rise

Board directors are increasingly taking steps to reduce the risk of cyber attacks.

	2014	2015	2016
Increased board involvement	59%	69%	74%
Increased cybersecurity investments	55%	70%	80%
Secured and protected digital assets	NA*	34%	45%
Created a breach response plan	NA*	45%	63%
Increased cyber requirements for third-party vendors	NA*	35%	43%
Purchased cyber insurance	10%	28%	28%

*not asked in 2014

Source: The BDO USA Board Survey, September 2016

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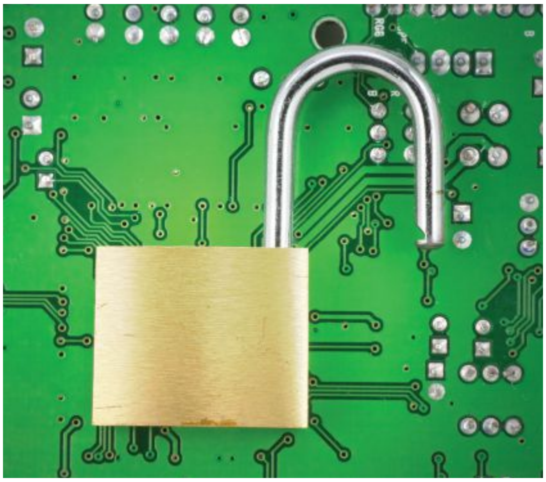
Quantifying Cyber Risks

Companies are clamoring for the data and information they need to manage their exposures. By David M. Katz

Galvanized by recent cyber attacks against corporations, boards of directors are pushing risk managers and the insurance industry to quantify cyber risks. The demand for better predictive data on computer breaches stems from directors' desire for clarity on how to either self-fund or transfer the risk to insurance companies. ¶ Seeing disclosure as a way to exert downward pressure on an organization to do a better job of predicting and managing cyber risks, at least one board has also pressed its company's management to report and quantify the threat.



Meanwhile, the insurance industry, in its infancy in terms of quantifying cyber liabilities, is being accused of peddling commoditized products that cover only a fraction of the potential risks. (Although a large number of companies have purchased stand-alone cybersecurity policies in 2016.)

Those are key takeaways for CFOs from the presentations by insurers, insurance brokers, corporate risk managers, and chief information security officers at the Cyber Risk Insights Conference held by Advisen, a risk management data firm, in October. High attendance at the event attested to the intense interest corporations are taking in preparing for looming, though ill-defined, cyber risks. Indeed, two panelists, the risk managers of Merck and Time, both classified cyber-risk exposure as one of the top perils in the hierarchy of risks their corporations face.

"Cyber is absolutely a top risk in the organization. In fact, we've actually begun disclosing it as such in our public filings, alongside our business and operations risks," said Eric Dobkin, the director of insurance and risk management at Merck. "It's gotten attention from all levels."

Similarly, Laura Winn, the director of risk management and treasury at Time, said the media giant's board considers attacks on the company's computer systems a "top-three risk." Prompted by the board, the company's risk management department is working to quantify the company's exposure to cyber attacks so that it can transfer some of the risks to insurers, she added.

Culling the media company's cyber-risk-management information together in a meaningfully predictive way is a tough task, however. That's because "our organization is siloed," she said. "One thing we need to do is bring everyone together, outside of the crisis management team," to gather the data needed to underlie a corporate-wide strategy to prevent cyber losses before they happen.

Merck has embarked on a similar path. "Within our organization, we have challenges and questions about how to quantify the risk," said Dobkin. He works on quantification in conjunction with the chief information security officer, but said he works on the issue with others as well.

"I struggle to think what part of the organization isn't touched by the risk," he added, noting that the company's manufacturing, research, and distribution functions are all exposed to cyber attacks.

Exposure Disclosure

Both risk managers suggested that making cyber-risk disclosure part of corporate financial reporting could have preventative effects. But their companies only report the existence of the risks, not the extent of them. In its most recent 10-K, Merck reported that it could "experience a business interruption, intentional theft of confidential information, or reputational damage from espionage attacks, malware or other cyber-attacks, or insider threat attacks...."

Yet Merck's quantitative reporting on the risks remained threadbare. "Although the aggregate impact on the company's operations and financial condition has not been material to date, the company has been the target of events of this nature and expects

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them to continue," Merck reported, without giving numbers.

In its most recent annual report, Time disclosed: "Like other companies, we have on occasion experienced, and will continue to experience, threats to our data and systems, including malicious codes and viruses and other cyber attacks. The number and complexity of these threats continue to increase over time." Again, there was no actual quantification of the risk.

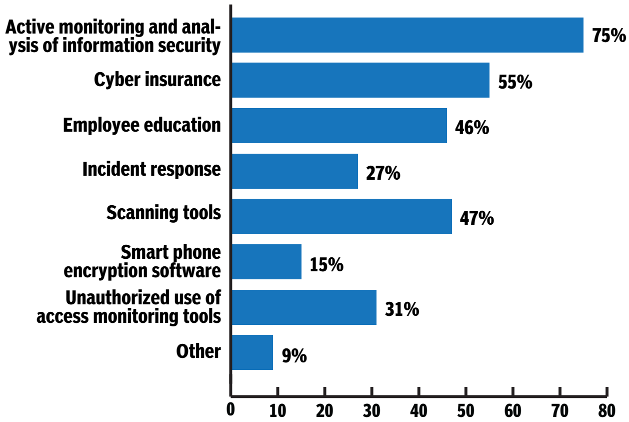
"It's difficult to quantify what the exposure is to our organization," said Winn, noting that it's hard "just getting the right payroll [data] for workers' compensation insurance and risk management purposes."

A large retailer she previously worked for also disclosed cyber risk in its 10-K but didn't quantify it, Winn recalled. As a result, that company's board began to press for more details on the extent of the risk. "Disclosure does push the board to push down" on the rest of the organization to get better risk information, she said.

For its part, Merck's risk management department gets questions about how to quantify risk from the finance department, which it reports to, said Dobkin.

Where the Cyber-Risk Money Is

Companies' top spending priorities in 2016 were less about technology and more about preparation, education, and risk transfer.*



*Based on a Risk Management Society survey of members with more than 1,000 employees and annual revenue of more than $1 billion. The September 2016 survey yielded 272 respondents.
Source: 2016 RIMS Cyber Survey

Looking for Answers

One of the prime sources corporations would go to for information and advice about how to manage risk exposures, the property-casualty insurance industry, is only just starting to gain a true understanding of how to forecast cyber losses. To the industry, "the role of the insurance market is shrouded in clouds," said Dominic Casserley, the president and deputy chief executive officer of Willis Towers Watson, the big insurance broker and consultancy. Insurers "have no idea where it will go."

Said Ben Beeson, cyber risk practice leader for insurance broker Lockton Cos.: "Two-thousand sixteen was the year when we became aware of the fact that the consequences may be much broader than just the costs associated with handling a company's personal data," potentially involving attacks on the internet of things, he said. "Not just the data but the physical assets may be at risk, and [cyber criminals] just might attack you physically."

A September survey by the Risk and Insurance Management Society found that 80% of responding companies bought a stand-alone cybersecurity policy in 2016. The annual RIMS cyber survey polled 272 respondents on issues ranging from exposure concerns and first- and third-party risk to issues surrounding government regulations. (The majority of respondents work for companies with more than 1,000 employees and annual revenue of more than $1 billion.)

Almost 70% of companies now transfer risk of cyber exposure to a third party, RIMS found. The purchase of stand-alone cybersecurity policies increased 29% from the previous year. That's thanks, in part, to more-versatile insurance packages, said Emily Cummins, a member of the RIMS board of directors.

"The take-up rate increases as more people are educated in the space," Cummins said. "As insurance suites become increasingly available, more companies want to procure a plan that can fit their own unique needs."

Indeed, rather than just trying to push products, insurers should seek to tailor coverage to the needs of each individual corporate client, according to Beeson. "When it comes to trying to understand how to transfer cyber risk from the balance sheet ... [corporate insurance buyers are] facing ambiguity, a jigsaw puzzle of insurance products that overlap in some areas and exclude in others," he said. CFO

Editor's Choice

Banks' Cybersecurity Targeted

In October, U.S. banking regulators proposed measures to beef up the cybersecurity defenses of financial institutions and mitigate the impact of cyber attacks. The largest banks would have to develop a risk management plan and show they can get their core operations running within two hours of a cyber attack or major IT failure.

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The End of Accounting?

If Baruch Lev is right, the old models don't work anymore. By David M. Katz

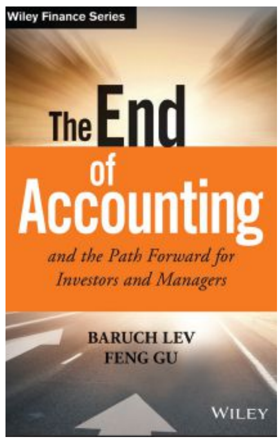
Although the title of the new book Baruch Lev has co-authored, *The End of Accounting,* provocatively suggests the end of financial reporting as we know it, he cautions that he really isn't calling for its absolute elimination. "We don't recommend getting rid of financial reports. The financial report as an historical document will always be important. You need to have some kind of an historical perspective of the business," Lev, a professor of accounting and finance at New York University's Stern School of Business, acknowledges. "There is some importance in knowing the past. I don't completely disregard it. But it doesn't give you linear information about what will happen in the future.

"What we are saying is that current financial reports don't provide a clear guide with respect to the future. And that's what we set out to change," says Lev, referring to the book he wrote with Feng Gu, a professor of law and accounting at the University of Buffalo.

In their book, published by Wiley, the authors contend and attempt to prove that "those voluminous and increasingly complex quarterly and annual reports ... [have] lost most of [their] usefulness to investors... ." They cite the Financial Accounting Standards Board's 700-plus-page 2014 revenue recognition standard as an example of such length and complexity.

Further, corporate managers should be worried about "the deteriorating usefulness of financial information" because it increases investors' risk, according to Gu and Lev. In turn, that hikes companies' cost of capital and slashes their share values.

Besides diagnosing the problems posed by the abundance of outdated and wordy rules, the authors propose that companies file a brief disclosure document they dub the "Strategic Resources and Consequences Report."



Based mainly on non-accounting information, the report would focus on a company's business model and execution of it. The document would highlight such "fundamental indicators" as Internet and telecom companies' new-customer and churn rates; car insurers' accident severity and frequency and policy-renewal rates; biotech and pharmaceutical company clinical trial results; and energy companies' proven oil and gas reserves. These indicators "are more relevant and forward-looking inputs than ... traditional accounting information" like earnings and asset values, according to the book.

At least since the accounting scandals of the early 2000s, Lev has been a well-known advocate for more-extensive corporate reporting of intangible assets. He recently spoke with *CFO;* following are edited excerpts.

What does your book title, *The End of Accounting,* actually mean?

The end of accounting in the current way it is conducted, meaning the constantly increasing, extremely complex regulations that fewer and fewer people understand. This, in our opinion, should come to an end.

How practical would it be to put your system in place?

Very practical. We demonstrate our disclosure paradigm on four specific industries: media and entertainment, oil and gas, pharmaceutical and biotech, and insurance. The Strategic Resources and Consequences Report is not another 60- or 70-page report on top of the financial statements. It's a one-page or, at most, two-page report that focuses on all the things missing from the financial statements.

These are what economists call "strategic assets," or assets that create value. In this economy and in other developed economies, value is not created by factories, machines, and inventory. All your competitors have those in roughly equal measure. Value is created by unique strategic assets like franchises, patterns, brands, specific business processes, and customer-recommendation algorithms. And all of these assets are completely missing from the financial report.

To be clear, we are not calling for putting values of intangibles in the financial statements. This would be difficult, if not impossible. We are calling on companies to recognize them as assets just as machines and buildings and inventory are recognized as assets, which is much, much easier in that it doesn't require any valuation.

Your remedy seems to focus mostly on technology and science companies, which have lots of intangibles. But what about industrial companies or those heavily weighted toward tangible assets? How would your plan improve the accuracy of their financials?

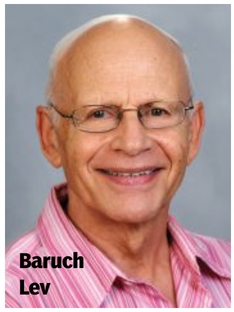
It really is not limited to technology and science companies, because in today's economy you cannot succeed without innovation. And innovation is achieved by intangibles. For this reason, we have insurance as one of our four industries. It's an example of an industry that's definitely not high-tech and not science.

What gives an insurance company an advantage over others? Specific client services, which are reflected, for example, in the company's policy renewals. So if people are dissatisfied with the company, it will have a low policy-renewal rate. And policy renewals are not a GAAP indicator.

Insurance companies also engage in innovation, such as developing the plug-in-the-car device that tracks driving behavior. Some people don't want others to know about their driving behavior, of course. But insurance companies claim that, when they can track driving behavior, they can be more specific about the insurance rates. This is a very interesting innovation. It's R&D, since some companies have patents on these devices. So in practically every industry, high-tech and low-tech, there are innovations, and those are really not reflected in the financial reports. That's what we are focusing on.

But doesn't changing the indicators into something more industry-specific, more unique, threaten the comparability of the standards?

I've been an academic and practitioner for a very long time, and I've never believed in uniformity across industries. When you look, for example, at financial analysts who analyze companies, they all specialize in industries: pharmaceutical, software, oil and gas. The fact is that the business models of companies differ significantly across industries. And you cannot have a good information system that is uniform across industries. You can refer to the balance sheet, but banks' balance sheets are entirely different from those of retailers.



Baruch Lev

"The fact is that the business models of companies differ significantly across industries. And you cannot have a good information system that is uniform across industries."

You seem to be saying that GAAP is built on a false premise: that uniform standards should apply to all kinds of industries.

Yes, and FASB has recognized it, because you have specific GAAP rules for oil and gas companies, for insurance companies, for banks, for software producers. But I wouldn't call what we're proposing clearly industry-specific. It focuses on the strategy, on the business model of the company, and because of that, it must be industry-specific.

What's your overall message to CFOs?

I'm in contact with many CFOs, and plenty of them already sense that there is a serious problem with the relevance of the information in financial reports. I gave an early version of our book to a CFO to read, and his comment was, "Baruch, I'm going to disappoint you. We know this."

Another way I know they already sense this is that there is a significant increase in non-GAAP information. And I don't speak here about non-GAAP earnings. I know that's very controversial. Instead, for example, all pharmaceutical and biotech companies voluntarily provide extensive information on their project pipelines. All media, entertainment, and insurance companies provide extensive information on their customers. This is not required.

So they already sense serious problems with information, and they try to overcome it by providing additional information, particularly on quarterly earnings calls. They provide extensive tables and graphs, and disclose lots of information in the calls, particularly in answering questions.

Now the only problem with this voluntary, non-GAAP disclosure is that it is not uniform. Some companies provide this information, other companies provide that information. And it's not even consistent over time: some provide it in one year and then stop in the next year and move to other things.

But non-GAAP metrics give rise to lots of skepticism because they can appear to be self-serving and manipulative.

You're right. There's also great skepticism about GAAP reports, by the way, which easily can be manipulated and massaged. How do you get the phenomenon that 70% of all companies beat analysts' consensus? It's impossible without some companies somehow slightly massaging the data. But there may be more skepticism with respect to something that is not standardized.

There is skepticism with respect to non-GAAP earnings because some companies are playing with the numbers. They are deleting all kinds of regular expenses that really should not be deleted. CFO

Courtesy Baruch Lev

Intellectual Capital: The Hidden Talent Metric

Talent is what drives intellectual capital, but neither are well-reflected in corporate books. By David McCann

Did you know that assets comprising 86% of the market value of Dow Jones Industrial Average companies are not reported in financial statements? Perhaps not, if you think of company value strictly from an accounting standpoint. ¶As the late Roger Sinclair forcefully argued in three articles on CFO.com, it seems crazy that accounting rules still prohibit companies from including the value of internally created intangible assets alongside tangible assets in their financial statements. After all, there's no debate that today, a majority of most companies' market value derives from brands, patents, technologies, and other intellectual capital. That wasn't the case when the process of standardizing accounting practices began hundreds of years ago. It wasn't even the case, for the most part, 30 years ago.

Sinclair was a brand valuation expert who largely spent his later years beating this drum. Put simply, he wanted the value of brands to be more visible to investors.

Another party beating the drum these days, but with a somewhat different purpose, is a firm called Talent Growth Advisors. The firm specializes in helping companies build talent strategies that link to business value. Its co-founders and managing directors are Tom McGuire, a former CFO of Revlon who also worked at Coca-Cola in finance, marketing, and talent acquisition, and Linda Brenner, a former human resources executive who also is CEO of HR technology solutions firm Skillsify.

Brenner and McGuire are pushing

an idea that has two main components: (1) key talent is the only thing that drives the creation of intellectual capital; and (2) because internally created intellectual capital isn't in the financial statements (only acquired intellectual capital is, in the form of goodwill), executives don't pay enough attention to developing key talent.

So, CEOs and CFOs don't understand that critical roles—like product development talent at pharmaceutical and technology companies or marketing talent at consumer products companies—are enormously valuable?

"I think that intuitively they do," says McGuire. "But because those values aren't on the balance sheet, because they don't put dollar signs beside those assets, they don't have a metric that drives the right behaviors." McGuire and Brenner have created a metric that, they say, achieves that end.

"The cost of developing and maintaining intellectual capital assets," McGuire continues, "is recorded as an expense on the income statement—along with all other people costs like those for 'HR director' and 'accounts payable clerk,' which truly *are* expenses—rather than as an investment in those critical assets."

For decades, says Brenner, companies have been failing at understanding the important difference between key talent and everyone else.

For example, a large company typically has a recruiting department that may be responsible for filling thousands of jobs per year. "There is typically no framework for saying, 'Let's fill this job differently than that one,' or 'Let's put our best recruiter on this one,'" says Brenner.

"The same is true for performance management: it's the same process for everyone," she adds. "But no game will be won in this knowledge economy by spreading limited resources as thinly and evenly as possible in this way."

Quantifying Intangibles

Given the failure of accounting rules to account for the value of intellectual capital, McGuire and Brenner have created what they call a "workaround" metric.

The metric is calculated first by coming up with a company's "enterprise value"—market capitalization, plus outstanding debt and marketable securities, minus cash and cash equivalents.

From that value, the adjusted book value—for purposes of this calculation, total shareholders' equity, again adjusted by adding debt and subtracting cash and cash equivalents—is subtracted. The resulting value thus consists purely of internally created intellectual capital that's not on the books.

To that resulting value, the calculation adds in the value of intangible assets that *are* recorded on the books, including goodwill (i.e., the value of acquired companies' intangible assets) and trademarks. The result is called the "intellectual capital value."

Finally, an "intellectual capital index" (ICI) is calculated by dividing the intellectual capital value by the enterprise value. The index shows how much of the company's value is in its intellectual capital.

McGuire hopes to position the ICI as a tool that companies will actually use. "The ICI will help companies manage the development of those internal assets and value them, even though they are not on the books," he says.

Calculating ICI

So far, while McGuire intends to calculate an ICI for all *Fortune* 500 companies, he's done so for only the Dow 30 companies—as of the end of their 2015 fiscal years—except for the five that are in either the financial services or petroleum industries.

Four of the 25 companies—Boeing, Pfizer, Apple, and United Technologies—had an ICI of greater than 1.0, meaning that the value of their intellectual capital was actually greater than their enterprise value. Their ICIs were 1.04, 1.04, 1.04, and 1.01, respectively. Each company has made acquisitions that provided enough goodwill that, when added to their internally developed intellectual capital, the combination outweighed their net equity.

"Some have asked, does that mean those companies are undervalued?" says McGuire. "I don't want to say that. It can be one conclusion."

Among the 25 companies evaluated, the average ICI was 0.86. The lowest ICI was registered by Caterpillar, at 0.48, followed by American Express (0.52), Wal-Mart (0.57), and Cisco (0.64). (See the complete list, left.)

However, McGuire cautioned that a company with a higher ICI than one in another industry is not necessarily a "better" company. Rather, companies should only be compared with others in their industry.

"For a company with a high ICI, its worth certainly depends more on intellectual capital and thus on its talent," he says. "But every company should take the numbers in its industry and use them to develop talent strategies that maximize the value they get from talent."

McGuire expects that when he performs calculations for the entire *Fortune* 500, those in the Dow 30 will tend to be the leaders in their respective industries. "In each industry there will be a range," he says. "If you're at the bottom of the range, it will tell you where you could be and point you toward strategies that could let you get the most out of your position."

Talent Growth Advisors also listed the 25 companies according to intellectual capital value per employee. In that category, one company, Visa, was an extreme outlier at more than $14 million per employee. Next was Apple, at just under $4.5 million.

Visa had relatively low headcount—about 11,000 employees for a $14 billion business—and very little investment in tangible assets, McGuire notes. Apple, by comparison, had about 10 times as many employees but 16 times greater revenue and far greater tangible assets. "We will see others with similar characteristics as Visa in the *Fortune* 500, but I have a feeling Visa will still be at the top of the heap," says McGuire. CFO

Measuring Intellectual Capital

The higher a company's Intellectual Capital Index (ICI), the more its enterprise value comes from its brands, patents, technologies, and key talent.

Company	ICI*
Boeing	1.04
Pfizer	1.04
Apple	1.04
United Technologies	1.01
United Health	0.98
Visa	0.98
Johnson & Johnson	0.98
Procter & Gamble	0.97
Microsoft	0.93
Dupont	0.93
3M	0.91
Nike	0.91
Merck	0.89
Home Depot	0.86
IBM	0.86
Coca-Cola	0.85
Disney	0.83
McDonald's	0.83
Intel	0.72
General Electric	0.71
Verizon	0.70
Cisco	0.64
Wal-Mart	0.57
American Express	0.52
Caterpillar	0.48

*The ICI is calculated by dividing a company's intellectual capital value by its enterprise value. The intellectual capital value is calculated by subtracting adjusted book value from enterprise value and then adding the value of goodwill and trademarks.

Source: Talent Growth Advisors

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Driver Performance

Do key performance indicators really move companies forward? **By Michael S. Blake**

Key performance indicators (KPIs) focus management's attention on a finite array of statistics that are indicative of a company's performance and are believed to explain the company's desired financial results, such as profitability. KPIs have a significant weakness, however: They are backward-looking. When a company's KPIs are where it wants them to be, everything is great. When the KPIs fall short of expectations or goals, there are problems to be addressed. There is, necessarily, an information lag between a firm's activities and most KPI reports.

KPIs are powerful in that they help to address information overload. Any manager has more information available, or even thrown at him, than he can possibly process in a timely and coherent manner. KPIs allow us to focus on the data that's important.

Because KPIs are generally quantified (or at least quantifiable), they provide an objective tool for measuring business performance at all levels, from the enterprise level to the business unit, team, department, and individual employee levels. KPIs serve as the basis for reporting performance, providing feedback on performance and prompting discussion over what changes, if any, need to be made to the relevant business processes or assets devoted to them. KPIs are often used for goal setting, and compensation is frequently connected to them.

However, if management is interested in managing proactively, rather than reactively, it should consider monitoring key performance *drivers*. Key performance drivers (KPDs) are the day-to-day activities that are required in order to produce the desired KPI results. If the KPDs are correctly identified, then, for the most part, positive results in KPDs should lead to positive KPIs.

Managing to KPDs provides value in two ways. First, a company can monitor whether employees are doing the things on a daily basis required for the company's success. When KPDs fall short, management can intervene quickly—before the KPIs are significantly impacted. Second, KPIs can be influenced by luck (good or bad) or factors outside of the company's realistic control, whereas KPDs are much less likely to be impacted by luck.

For example, let's say a company meets its KPI on sales, but 30% of the sales for the quarter are accounted for by the largest order in the company's history. At the same time, the number of sales calls falls short by 15% of the target. Should the sales team be celebrating, or wiping its brow that it had a big order that covered up the lackluster performance?

From a managerial perspective, addressing the slowdown in sales calls is much more vital to the company's sustainable success. It's great to get a windfall, but companies that rely on windfalls as a business model don't last very long. While human nature tends to make us value the dollar opportunity lost less than the actual

KPDs Over KPIs

By focusing on key performance drivers instead of their corresponding key performance indicators, managers can be more proactive.

Key Performance Indicator	Key Performance Driver
Customer feedback score	Customer outreach calls or meetings
Days sales outstanding	Number of collection calls on accounts > 30 days
Employee turnover	Number of employee relationship-building events
Gross profit	Person-hours to install system on client sites
Sales revenue	Sales calls made
Website conversion rates	Time to respond to website inquiries
Workers' compensation claims	Number of training hours provided

Source: Arpeggio Advisors

dollar lost, the astute executive knows that they are equal. Had the number of sales calls made hit the team's target, the KPIs might have been even better.

The accompanying table (see "KPDs Over KPIs," facing page) provides examples of KPDs that CFOs might be better off managing to, rather than managing to their corresponding KPIs.

Management may, of course, discover that there is a weak correlation between the company's KPDs and KPIs. That can actually be a good thing, as it will prompt management to identify different KPDs, and it could prompt the firm to change the activities it emphasizes.

For example, if publishing white papers has no impact on a company's web traffic, then it may need to rethink why it's producing white papers and whether resources could be more effectively deployed elsewhere.

Monitoring KPDs can result in consistently improved KPIs as the company is ensuring that day-to-day activities are aligned with its goals and that those activities are being pursued vigorously and consistently.

Michael Blake is the founder of Arpeggio Advisors, a boutique business appraisal and corporate strategy advisory firm.

Focusing On Value Creation

Some finance chiefs struggle to drive growth while running traditional finance functions.

Many finance chiefs want to move beyond traditional operating models to those that drive growth and value. But they are hesitant—afraid of disrupting the business when the original model is already working. Some are concerned about taking the business forward under contradictory mandates, making it difficult for them to focus sharply on re-architecting the way their firms operate. They question how to drive growth while also running traditional finance functions, such as quarterly reporting and budgeting. They wonder how to control risk but fuel digitalization, which can actually fuel risk.

To begin to lead change in their organizations, CFOs need a better understanding of changing market dynamics. While they understand that digitalization is driving corporate change, many finance chiefs still feel they need much greater knowledge of emerging digital technologies.

Some have experimented with new ways to provide growth but are looking for more experimentation and agility in financial systems and acquisitions so they can have greater involvement in breakthrough projects.

Even though changing the business will involve an ongoing education for CFOs in the coming years, there are a few first steps to consider when assessing how to shift to an operating model that creates value successfully.

- **Find fuel for growth and find it early.** Most leading CFOs realize they need to know how much money they can find to invest in growth. The money a company saves by partially digitizing is often what's put in the coffers to invest in new growth opportunities.

- **Move away from a zero-failure culture.** Finance has traditionally lived in fear of errors, and rightly so. Balance sheets matter. But, when driving value and finding new ways of doing business, failures matter because they indicate movement and growth. It no longer makes sense to spend six months developing business processes around a product that may have a shelf-life of one year before the next iteration is developed. Be fast and flexible and allow for failures. They mean a team is innovating.
- **Make finance flashy.** To create value via an operating model, the finance function must become a driver of growth. This change may be the tallest order of all, because the profile of a finance professional must change significantly for the digital environment. Convincing digitally savvy talent to work for the "boring" finance department will require a CFO who can communicate the new value proposition.
- **Build from the outside in.** Since digital processes flow across departments and functions, building a new operating model in the old-fashioned, step-by-step and department-by-department way will not work. Building silos wreaks havoc on efficiency and effectiveness. A new model, with a digital culture to support it, needs to be built from the outside in, across all organizational dimensions.
- **Eat, sleep, and breathe the change.** Companies that do this well have leadership teams that adopt the change first. They do not advocate innovation while only supporting cost curbing. They do not embrace digital while still sporting stacks of paper on their desks. They touch all parts of the operating model at once: people, software, and systems. And they lead by example.

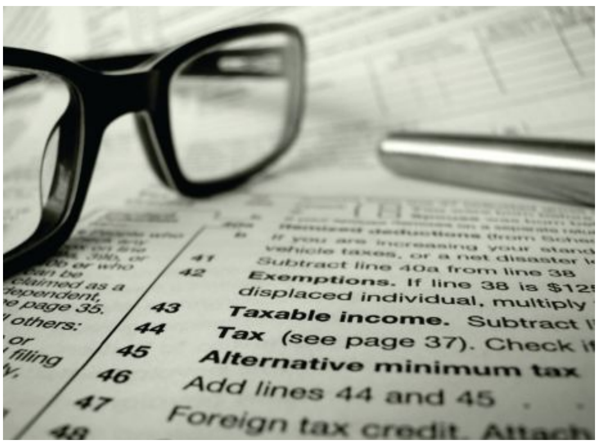
Christian Campagna is a senior managing director for CFO and enterprise value at Accenture Strategy.

Courtesy Accenture Strategy

Corporate Tax Reforms—Here at Last?

With the help of Congress, President-elect Donald Trump could make some of the biggest changes to the U.S. tax code in years. By Matthew A. Morris

After a dramatic upset victory in one of the most bitterly contested presidential races in recent history, Donald Trump now has some serious work to do. His corporate tax policies—which are vital to his platform of domestic growth and repatriation of U.S. income and jobs—will require significant changes to the Internal Revenue Code.



CFOs should familiarize themselves with these proposed changes before Trump's inauguration in order to fully explore the opportunities and risks associated with them.

As a threshold matter, it is important to bear in mind that Trump's pre-election positions on tax reform may not necessarily translate into proposed legislation. George H.W. Bush at the 1988 Republican National Convention famously pledged "Read my lips: no new taxes," only to agree to several tax increases in a budget compromise two years later. But Trump is unlikely to follow Bush's footsteps in this regard, especially because Trump, unlike Bush, will assume the presidency with Republican control of both chambers of Congress.

Here's a brief summary of Trump's top five proposed corporate income tax policies as listed on the Trump/Pence Tax Plan website and a description of how each could affect both large and small businesses.

1. Lower the corporate income tax rate to 15% from 35%. This is a clear game-changer, not just with respect to existing C-corporations, but also with respect to certain S-corporations that may wish to abandon their S-corp. status.

Most small businesses are deterred from C-corp. status because it imposes two levels of taxation on the same income—once at the entity level when the income is earned and again at the individual level when the corporation distributes the income to its shareholders in the form of a dividend. (Not all distributions to shareholders from C-corps. trigger the same double taxation as dividend distributions—for example, employee salaries and employer contributions to pension and profit-sharing plans are available as deductions for C-corps.)

With the highest corporate income tax rate currently at 35% and the highest individual tax rate on qualified dividends at 20%, the highest aggregate income tax rate is 55%. But if Trump is successful in reducing the corporate income tax rate to 15%, the highest aggregate income tax rate will be 35%, which is only two points higher than Trump's highest proposed individual income tax bracket of 33%.

Thus, a reduction in the corporate tax rate to 15% would remove a significant disincentive to selecting C-corp. status during entity formation, and may also prompt certain S corporations to abandon their S-corp. status under section 1362(a). S-corps. may discover that they can enjoy substantially similar tax benefits as a C-corp. without the restrictions associated with S-corp. status, such as limits on the type and number of shareholders and the inability to retain interest and profits. Trump also stated in his campaign that he would reduce the rate of individual income tax from all pass-through entities to 15%, but he recently appears to have abandoned that position.

2. Allow repatriation of corporate profits held offshore at a one-time tax rate of 10%. This is basically a one-time amnesty for large corporations that have engaged in multinational tax inversions, in which a U.S. corporation acquires a foreign

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corporation that conducts at least 25% of the affiliated group's total business activities. These inversions enable the newly created foreign company to engage in "earnings stripping" by saddling the U.S. subsidiary with debts owed to the foreign parent, and then expatriating any U.S.-source profits to the foreign parent in the form of interest payments on those debts.

Trump's plan would offer these multinational companies the opportunity to repatriate "corporate profits held offshore at a one-time tax rate of 10%," according to his tax-plan website. Thus, a company like Burger King—which in 2014 inverted from being a Miami-based company to a Canadian company by buying the Canadian chain Tim Hortons and shifting its corporate headquarters to Canada—could contemplate shifting its headquarters back to the United States in exchange for a one-time repatriation tax of 10% on its accumulated earnings and profits since the inversion.

The repatriation proposal—combined with the proposal to lower the corporate tax rate to 15%—could dramatically change the tax incentives for large multinational companies like Google, Apple, and Microsoft. They could decide to reverse or end pursuit of complex tax structures, such as the "double Irish with a Dutch sandwich," that require shifting a significant portion of profits and business operations overseas.

The repatriation proposal—combined with the proposal to lower the corporate tax rate to 15%—could dramatically change the tax incentives for large multinational companies like Google, Apple, and Microsoft.

3. Eliminate most business tax credits and "special interest" tax outlays, except for the R&D credit. While Trump's tax plan would reduce most corporations' overall tax burdens, it also would "eliminate the carried interest deduction and other special-interest loopholes" such as the domestic production activities deduction (section 199) and all business tax credits other than the research and development credit (section 41). (Carried interest is income flowing to the general partner of a private investment fund, which is currently taxed as capital gains rather than ordinary income.)

Although Trump's proposal to eliminate carried interest and business credits stems from his objective to "drain the swamp" and reduce corruption and the influence of special interests in Washington, many of the tax expenditures he seeks to repeal originate from public policy concerns rather than special interests.

For example, the business tax credits Trump proposes to repeal include the work opportunity credit under section 51(a) of the IRS code, which allows employers to claim a credit for a portion of the wages paid to targeted groups such as qualified veterans. If Trump plans to fulfill his election victory speech pledge to "finally take care of our great veterans who have been so loyal," then he may have to soften this hardline position on the work opportunity credit.

4. Entitle manufacturers to expense capital investment and lose the deductibility of corporate interest expense. This is actually two proposals in one. Trump's plan to allow manufacturing companies to expense (rather than depreciate) capital investments is not nearly as dramatic as the plans of several of his competitors during the Republican primary. Jeb Bush, Marco Rubio, and Rand Paul all advocated full current-year expensing of investment costs for all companies, not just manufacturing corporations. The Trump tax plan does not offer any specifics on the disallowance of interest deductions for manufacturing businesses that elect to expense capital investments.

5. Provide tax benefits for corporations offering on-site child care and pay part of employees' child-care costs. Trump's tax plan increases the annual cap for the business tax credit for companies that offer on-site child care—one of the few business tax credits that would not be eliminated—from $150,000 to $500,000. The plan also allows employers who pay a portion of an employee's child-care expenses to exclude these contributions from the employee's gross income. In consideration of these proposals, CFOs may want to weigh the relative costs and benefits associated with the expansion of their companies' on-site child-care programs and child-care reimbursement policies.

Over the first 90 days of his presidency, we will have the opportunity to see how vigilantly Trump plans to pursue an aggressive agenda of corporate tax reform. Even if Trump immediately proposes corporate tax legislation, he may be forced to compromise some of his original objectives to achieve consensus with more traditional "establishment" Republicans like House Speaker Paul Ryan and Senate Majority Leader Mitch McConnell.

Despite these challenges, however, Donald Trump is likely to initiate some of the most significant corporate income tax changes that we have seen in recent history.

Matthew A. Morris is a partner in the estate, financial and tax planning, and tax and tax controversy practice areas of law firm Bowditch & Dewey.

Misleading Metrics?

Non-GAAP metrics can help tell the story of a company's performance. But is their increasing prevalence starting to render the official earnings numbers less relevant?

BY DAVID McCANN

One way of looking at the Securities and Exchange Commission's increasing focus on companies' use of non-GAAP metrics is as a good-versus-evil drama. On one hand, such measures—generally arrived at by backing out certain nonrecurring or noncash expenses from profitability measures shown in GAAP financial statements—often enable a more precise telling of a company's story than is possible using only the official numbers. On the other hand, the potential for abuse—misleading investors by willfully painting a rosier picture of performance than is justified—is great.

The SEC, whose main mission in this matter is rooting out misleading information, is worried that the more nefarious motivation is gaining momentum. Over the past year-plus, SEC officials have publicly and repeatedly stated their

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concerns about the proliferation of non-GAAP metrics, which show up in everything from earnings releases to annual and quarterly reports, to proxy statements, to registrations of securities offerings and company websites.

In 2015, just 12% of S&P 500 companies reported only GAAP numbers in their public filings. That was down from 25% in 2006, according to Audit Analytics. And greater usage of the unofficial measures may translate to more rules violations. "We've observed a deterioration in compliance with the non-GAAP disclosure rules," says Mark Kronforst, chief accountant for the SEC's division of corporation finance.

The kicker is that the gap between the official and unofficial figures is widening. For example, again within the S&P 500, GAAP earnings per share rose from about \$50 in 2009 to just under \$90 in 2015, an 80% gain, according to Investopedia. However, the rise for non-GAAP EPS—often called "adjusted EPS"—was significantly steeper, doubling from \$60 to nearly \$120 over the same period.

That indeed suggests that in some cases sleight of hand may be involved. EBITDA is a commonly used non-GAAP measure, of course, but it has a standard definition that all the key stakeholders—companies, investors, analysts, and regulators—understand. That's not so for the oft-reported but variably defined "adjusted EBITDA," or most any other financial measure designated as "adjusted."

Speaking at a June conference, SEC chair Mary Jo White said, "In too many cases, the non-GAAP information, which is meant to supplement the GAAP information, has become the key message to investors, crowding out and effectively supplanting the GAAP presentation."

THE REACTION

How unhappy is the SEC with the presentation of non-GAAP metrics? In 2014, 13% of companies receiving comment letters from the commission in response to 10-K, 10-Q, or 8-K filings were taken to task over, or asked to explain, their non-GAAP presentations, according to Audit Analytics. Last year, that rate climbed to 16%. This year through October? 30%.

That means a company will have only itself to blame if the SEC opts to make an example of the company's improper use of non-GAAP metrics, suggests corporate attorney Richard Morris of Herrick, Feinstein. "The SEC has repeatedly stated that it is not a 'gotcha' regulator," he says. "It gives out advice and a very good map of the landscape. I look at what the SEC is saying here as, 'Here's the weather report. Be prepared.'"

IN MANY CASES, NON-GAAP INFORMATION "HAS BECOME THE KEY MESSAGE TO INVESTORS, CROWDING OUT AND EFFECTIVELY SUPPLANTING THE GAAP PRESENTATION."
—SEC Chair Mary Jo White

Morris, who says a client company of his received a comment letter, notes that "some people are in a mood to be

Threshold for Enforcement?

It's not yet known how vigorously the SEC will ultimately enforce its rules on the use of non-GAAP measures. Until now, the commission has brought charges over such usage only twice, once in 2009 and once in September 2016, against a real estate investment trust, Vereit, formerly known as American Realty Capital Properties.

In both cases, the SEC charged the offending companies with presenting outright fraudulent non-GAAP measures. But many observers believe the SEC is now setting the stage to make examples of companies over what some may regard as less-serious infractions.

A series of compliance and disclosure interpretations released in May 2016 gave further guidance on the SEC's views of how existing regulations governing non-GAAP usage should be interpreted. Key prohibitions addressed by the C&DI's included the following:

- Presenting a non-GAAP measure with greater prominence than the presentation of the most comparable GAAP measure. "One of the primary objectives of our work in this area was to improve compliance with the prominence requirement," says the SEC's Mark Kronforst.
- Backing out "recurring cash operating expense necessary to run the business"
- Reconciling EBIT or EBITDA presentations to operating income rather than GAAP net income
- Presenting a measure inconsistently from period to period
- Excluding charges when calculating a non-GAAP metric while not excluding any gains
- Accelerating the recognition of revenue from customers that are billed up-front for products or services to be delivered over time
- Presenting liquidity measures of cash generated on a per-share basis
- Not clearly defining "free cash flow" D.M.

Courtesy the SEC

combative with the SEC on this. I find that interesting. This is the SEC trying to help us. And soon, those who don't take the guidance seriously are going to be the recipients of enforcement actions."

Indeed, nearly 8 in 10 companies (79%) made changes to their non-GAAP presentations in their publicly filed financials for the period ending June 30, just six weeks after the SEC issued new compliance and disclosure interpretations (see "Threshold for Enforcement?" page 26), according to a study of 100 companies by law firm Debevoise & Plimpton. That doesn't necessarily mean, though, that those are all the changes necessary to fully comply with non-GAAP disclosure rules.

In fact, some observers think the SEC's lack of strong enforcement to date—sending comment letters but bringing virtually no litigation—may encourage complacency in terms of compliance with the guidance.

"These are early days, and there's probably a ways to go before some companies recognize that this is a material risk," says Dan Zitting, a former auditor who's now chief product officer at ACL, an anti-fraud-conspiracy and software firm.

On the other end of the spectrum, companies could over-react to the threat of enforcement, altering or removing presentations of non-GAAP measures to an extent that they're no longer telling the full story of their value to investors, suggests Neri Bukspan, Americas disclosure leader for Ernst & Young.

"I can see some companies doing that," Bukspan says. "But if you truly feel [your metrics] are appropriate and communicate important and salient information for investors, my suggestion is that you err on the side of sweating it."

THE ART OF DECEPTION

That raises the issue of the chicken-and-egg aspect to non-GAAP information. That is, why are companies providing more non-GAAP information these days? Is it to put the best possible spin on their financial performance? Or because stakeholders are demanding it?

"You'd like to think that the non-GAAP numbers are out there and presented as they are because investors and analysts want to see them," says Susan Markel, a managing director at AlixPartners and a former SEC chief accountant.

Similarly, Morris points to changes in the way investment advisers are researching companies. "They're looking at more non-financial-statement analytics," he says. "As that kind of analysis has developed, so has the need for companies to provide that data."

Others are more skeptical of companies' motivations. If companies weren't providing non-GAAP reporting, analysts would be coming up with their own measures anyway, and in fact, they do that now, notes Charles Mulford, an accounting professor at Georgia Tech University.

Suggesting another reason for the uptick in non-GAAP metrics, Mulford says, "You could argue that, in an environment where earnings growth is harder to come by, there is more pressure on companies to show growth."

He allows that nonrecurring charges for things like impairments, restructurings, and asset write-downs occur more frequently than nonrecurring gains. Also, it's the nature of GAAP to require more things to be written down than written up, he adds.

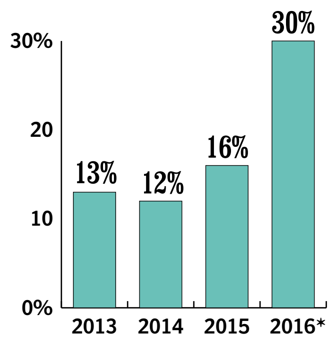
But even in times of strong earnings growth, "companies have a tendency to over-identify nonrecurring items," Mulford says. "They take out more than they should, in an effort, I think, to sway perception of performance."

A few years ago, Mulford was thinking about how he could compare on an apples-to-apples basis the impact of companies' non-GAAP presentations, as there are many different methods of arriving at non-GAAP income. He came up with the idea of simply expressing such measures as a percentage of GAAP income.

Along with a graduate student, he undertook a study of the *Fortune* 100 firms' fiscal-year 2013 financial presentations. The research, published in the July 2016 edition of the *International Research Journal of Applied Finance,* showed that 75% of the companies in the sample reported some type of non-GAAP income, and that for 75% of those, that figure exceeded GAAP income.

SUDDEN FOCUS

Among companies that received SEC comment letters in response to their 10-K, 10-Q, or 8-K filings, the percentage that were taken to task for, or asked to provide more information on, their usage of non-GAAP measures has skyrocketed this year.

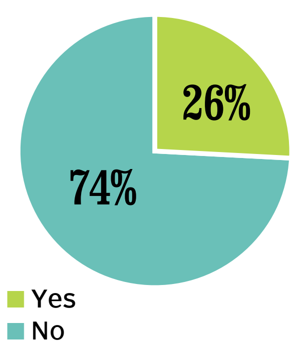


*through October
Source: Audit Analytics

COMPENSATION GAAP

Adjusting GAAP results when determining executives' pay is controversial.

Do you believe non-GAAP measures should be excluded from executive compensation calculations?



Source: BDO USA survey of 160 corporate directors, September 2016

Misleading Metrics?

And those net positive adjustments weren't small potatoes. For the 56 companies that burnished the view of their earnings, the average outcome was 129% of GAAP income, while the median figure was 118%.

The fact that the data for the study is now three years old is not relevant, Mulford states. "I don't see any compelling reason that we would find major differences today," he says. "The kinds of things companies were doing then are the kinds of things they're doing now." Except, companies are doing those things to greater effect: in 2015, according to Audit Analytics, the non-GAAP numbers that companies used in their official filings increased income 82% of the time.

Mulford, director of Georgia Tech's Financial Analysis Lab, is a purist when it comes to accounting propriety, taking an even harder line on non-GAAP reporting practices than does the SEC.

For example, he has a dim view of companies excluding certain merger and acquisition–related expenses—most prominently amortization of acquired intangibles—even though the SEC generally allows it, given the proper presentation. The exclusion is disallowed if a company's acquisitions are so frequent that they're deemed to be recurring. (Under the rules, companies should not label something as "nonrecurring" if it occurred another time within the two previous years or is likely to occur in the next two years.)

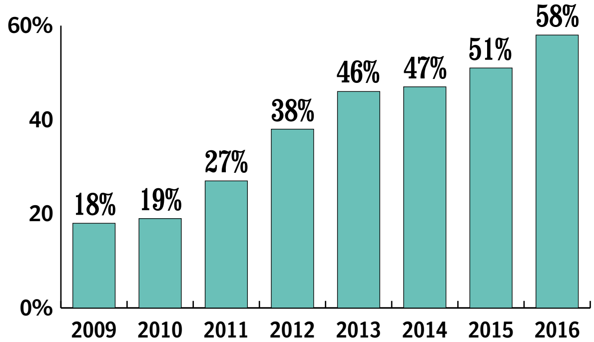
"You could argue that amortization of acquired intangibles is nonrecurring," he says, "but of course, the acquiring company includes the results of the acquired company in revenues and operating profit. So I don't buy the argument. It's not consistent to include income from an acquisition but exclude expenses of the acquisition."

In fact, Mulford considers all exclusions of amortization and depreciation expense problematic when it comes to calculating non-GAAP measures. "Those are normal recurring expenses," he argues, "and if you exclude them, that's not what profits are." That's a strong position, considering that amortization and depreciation are components of EBITDA,

POPULAR IN PROXIES

Use of non-GAAP language in proxy statements has increased dramatically since 2009.

% of proxy statements containing non-GAAP language



Source: Audit Analytics

Shades of Gray

Will the SEC ever be able to issue enough guidance on non-GAAP metrics that it's clear to companies whether they are presenting the metrics correctly? Not likely. And CFOs know it.

A case in point: Hodges-Mace, a maker of employee benefits management software, this year hired external consultants to help revamp one of its products. Given the company's relatively small size, the six-figure expense was material to its financial results.

The company categorized it as a nonrecurring expense and for that reason backed it out of GAAP earnings when creating a non-GAAP income measure.

"We're not going to do that next year, so it's a one-time investment in improving the product," says Mace-Hodges CFO Ron Shah. "We needed outside expertise to evaluate the product's functionality and scalability and deliver us a report, and our existing team is going to implement the changes. To me, it's not the same as hiring more developers."

Still, Shah acknowledged that others could take the opposite viewpoint—that since the company updates its software every year, the use of consultants versus internal resources doesn't make the expense nonrecurring. "That would be a legitimate position," he says.

Ron Shah, CFO of Mace-Hodges

Perhaps the Securities and Exchange Commission would take that view were it more focused on the activities of midsize and small private companies such as Mace-Hodges. For those companies, the audiences that count most are typically their equity investors and lenders. "I've had this conversation with them, and they fully support us on this," says Shah.

He adds: "When I'm in the investor relations or lender relations role, I'm arguing the point that I believe supports my position. But I have a healthy respect for how someone could have a different perspective."

D.M.

which a large majority of companies report, even if adjusted in some fashion.

By the SEC's lights, those exclusions are allowable, as they are not cash expenses—also true of stock-based compensation expense, another common and permitted exclusion.

Regardless, Mulford, simply put, is not a fan of EBITDA, period. "It's a terrible measure of performance for shareholders," he says. "It's not profit. It's a crude measure of cash flow available to service debt. But from a shareholder's point of view, debt has to be taken [into account]. You're trying to get at earnings that are available for the shareholders, and EBITDA is just not it."

INEVITABLY SUBJECTIVE

Unsurprisingly, CFOs aren't exactly thrilled by views such as Mulford's. "There are black-and-white guys, but there's a good amount of subjectivity when it comes to depreciation and amortization," says Tyler Sloat, finance chief at Zuora, an enterprise software firm. "You buy intangibles and amortize them over seven years, because you and the auditors agreed on seven years. But why not five years instead of seven? I don't know.

"Whenever you apply subjectivity to accounting treatments upstream from actual results," Sloat continues, "those results get diluted. Then how do you normalize them back to remove that subjectivity? That, I would argue, is a big part of the purpose of EBITDA."

While Sloat, like any CFO, is regularly immersed in traditional financial reporting, he's also very focused on a different kind of metrics. They're not what many would think of as non-GAAP metrics, because there is nothing in GAAP to which they could be reconciled.

Zuora makes and sells software-as-a-service applications for the booming market of companies with subscription business models. Investors in such companies are far less interested in GAAP numbers than in other metrics that are keys to assessing such businesses.

The best example of such a metric, according to Sloat, is net customer retention rate. "In the subscription world, having a net retention rate over 100% is really important," he says. "It shows that your upsell is outweighing your customer churn. It provides your investor base with enough information to know that if you spend a lot of money to acquire new customers, you'll be able to keep and monetize those customers for a long time."

Other concepts particular to subscription businesses include annual recurring revenue, churn, and customer acquisition costs. "None of these are GAAP numbers, yet companies are being run based on them, and they're what management is being held accountable for," says Sloat.

Morris, the corporate attorney, says he recently heard a presentation about a new subscription-based music-streaming service. "Throughout the entire analysis, not once did they talk about this service's financials," he says. "They were talking about market share, number of subscribers, and the size of their portfolio of music. And take some of the biggest companies we have now—when they were coming out, people weren't looking at their balance sheets."

MORE TO COME?

The SEC intended not to create a complete road map for the use of non-GAAP metrics, but rather to articulate some key concerns. Still, given the divergent perspectives on this matter, should the SEC provide more guidance? Opinions vary on that, too.

In a poll of 160 board members at public companies by accounting firm BDO, participants were split almost evenly as to whether they'd like to see more guidance, with 51% in favor and 49% opposed. But the result doesn't necessarily mean boards have radically different opinions, according to Paula Hamric, a partner in BDO's SEC department. Rather, it may reflect that they're not quite sure how to see it.

EBITDA "IS A TERRIBLE MEASURE OF PERFORMANCE FOR SHAREHOLDERS.... IT'S A CRUDE MEASURE OF CASH FLOW AVAILABLE TO SERVICE DEBT."
—Charles Mulford, Georgia Tech University

"Certainly, additional guidance would simplify the compliance effort," says Hamric. "But right now, the SEC staff is still trying to figure out what constitutes 'misleading.' It's easy for a company to correct issues of prominence in presenting non-GAAP metrics ... you change the order of some text, you put the non-GAAP numbers closer to the GAAP ones. It's much harder to define what's misleading. More guidance around that would help."

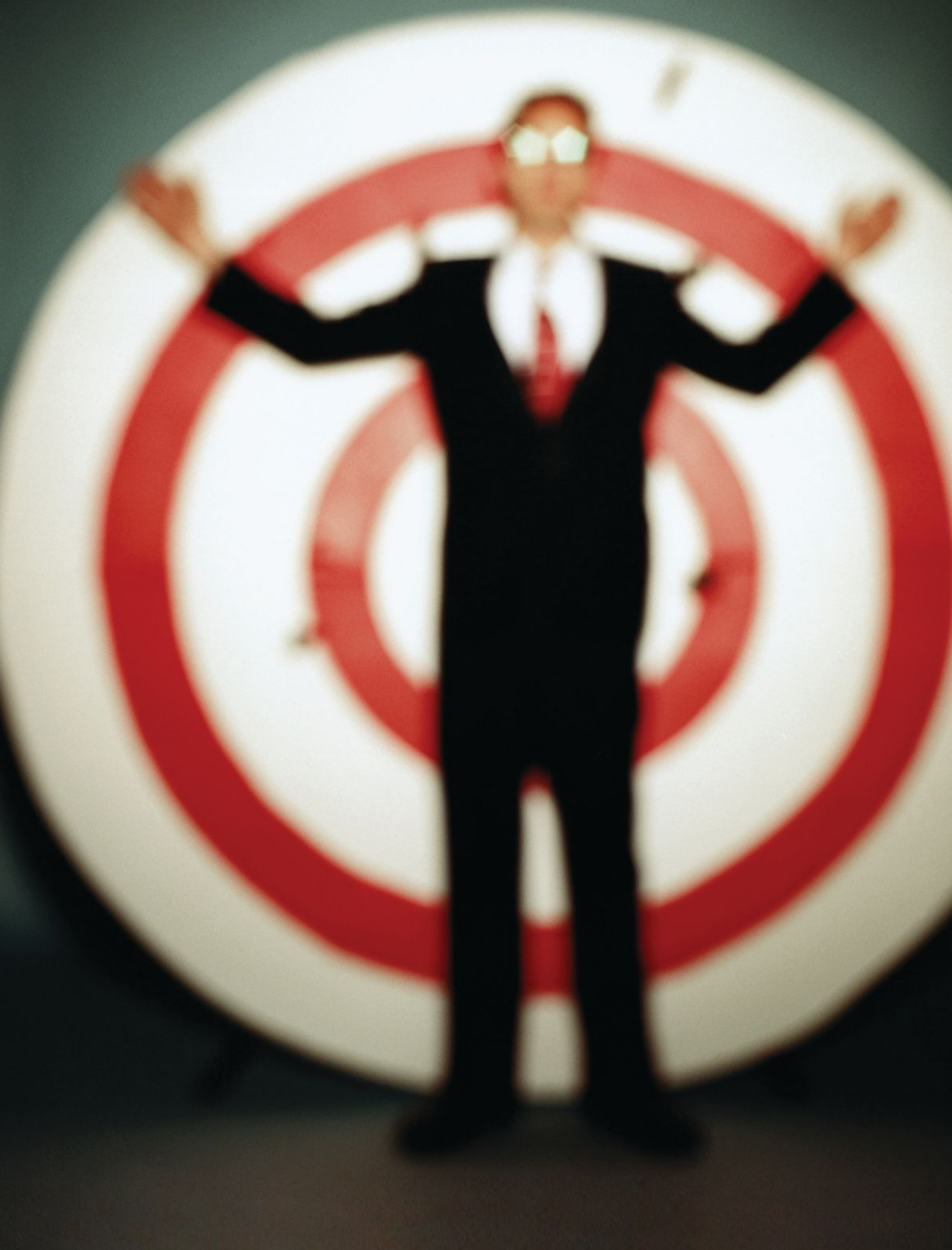
However, Hamric also observes that "having too much proscriptive guidance may end up reducing the usefulness of non-GAAP disclosures, because what's meaningful for one company is not meaningful for another."

For Markel, the former SEC chief accountant, the existing guidance is "pretty good" and gives the commission a framework for enforcement against companies that "take advantage" of the leeway the rules provide. If there is to be more guidance, it won't come for some time, she opines.

Morris thinks otherwise. The C&DI's issued in May were "really just the opening statement by the SEC," he says. "There is a lot of discussion about this, both at the SEC and in accounting circles. This is not the end." CFO

DAVID McCANN IS A DEPUTY EDITOR OF *CFO*.

Courtesy Mace-Hodges, Georgia Tech University



THE RISING RISK OF BEING CFO

The drive to combat corporate misconduct is making it a dangerous time to be a finance chief.

BY RANDY MYERS

For CFOs, the margin for error continues to narrow as regulators strive to hold individuals responsible for companies' misdeeds. In just a year, the pressure has been turned up considerably: In September 2015, U.S. Deputy Attorney General Sally Yates warned in a widely published memo that the Department of Justice would be doubling down on efforts to hold individuals accountable for corporate wrongdoing. Then, last August, the 9th U.S. Circuit Court of Appeals ruled that a CFO could be forced to give back incentive and stock-based compensation if his or her company has to restate its financial results—even if that restatement is not attributable to CFO misconduct.

Want more? Over the past decade, the plaintiffs' bar has unleashed a small avalanche of class-action lawsuits against corporate and institutional retirement savings plans and their fiduciaries. These suits allege excessive payment of fees and other violations of the Employee Retirement Income Security Act. They put CFOs at risk because finance chiefs often serve on retirement plan committees, making them fiduciaries under ERISA.

More recently, the plaintiffs' bar has sued individual executives over allegations of self-dealing and embezzlement in corporate health-care plans. And while all this has been happening, increased protections for whistleblowers introduced by the Obama administration have boosted incentives for workers to report their employers' missteps, creating still more potential for civil and criminal investigations.

"The regulatory environment has heightened

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dramatically," says Matthew Flanigan, CFO of manufacturing company Leggett & Platt. "And the plaintiffs' bar mindset, as a business model, is much more in place than it was 10 or 15 years ago."

"This doesn't keep me up at night," says Jim Moylan, CFO of network equipment company Ciena, echoing a common refrain among finance chiefs. "But the fact that there is so much risk has forced us to have a much heightened sense of responsibility."

WHAT YOU DON'T KNOW ...

The 9th Circuit decision in *SEC* v. *Jensen* revolved around a fraudulent revenue recognition scheme at a now defunct water-treatment company, Basin Water. The legal underpinning is Section 304 of the Sarbanes-Oxley Act, which requires CEOs and CFOs to repay bonuses and other incentive- or equity-based compensation in the wake of an accounting restatement triggered by misconduct. The decision to apply the law in cases where the finance chief is not the source of the misconduct is not binding on courts outside the 9th District, which covers the nation's nine Western-most states. Therefore, its ultimate influence has yet to be determined. But for now it places CFOs in an even more precarious position every time they attest to the accuracy and completeness of financial statements.

"There's not a public company in America that could withstand a full, substantive audit and not have errors and mistakes found in the books and records of the company," explains John J. Carney, a former securities fraud chief for the Department of Justice and now co-leader of the white-collar defense and corporate investigations team at Baker & Hostetler. If his assessment is true, it means CFOs are routinely certifying documents that are not, to the nth degree, accurate. "God willing, the SEC won't bring cases where there isn't some direct evidence [of CFO wrongdoing]," Carney says. "But it's very scary for a certifier of financial statements. Assuming you are an honest, diligent officer of the company, how do you get comfortable in an environment where the authorities are targeting individual liability, and the courts are saying that even an innocent mistake might form a basis for liability? If there were a bullseye painted in black on the back of the CFO, now it would be painted in red."

The Yates memo amplifies the risk of serving as a corporate officer in several ways. Beyond vowing a new focus on individual responsibility—U.S. attorneys are now instructed to target individuals at the very start of an investigation—it mandates close cooperation between the department's criminal prosecutors and civil litigators. It also says that, for companies to receive credit for cooperating with investigators, they must now identify all culpable individuals regardless of their position within the company and fully disclose all relevant facts about individuals' misconduct (see "Pursuing People," page 34).

"No more picking and choosing what gets disclosed," Yates told an audience at New York University School of Law the day after circulating her memo. "The public expects and demands this accountability. Americans should never believe, even incorrectly, that one's criminal activity will go unpunished simply because it was committed on behalf of a corporation."

All surely true. But as Kevin LaCroix, executive vice president of specialty insurance broker and consultant RT ProExec explains, the Yates memo sets the stage for potentially deep conflicts of interest between corporations, which often want to earn cooperation credit, and their own executives, who want to avoid individual prosecution.

"If it appears the company is targeting you," Carney says, "you have to ask the question, 'Is it better to go directly to the government?'"

In part because past vows by the DOJ to crack down on individuals have yielded few results, LaCroix suggests it's too early to know for sure what impact the Yates memo will have on the prosecution of corporate executives. Many, though, are closely following the DOJ's investigation of German automaker Volkswagen's cheating on U.S. emissions tests. In September, the DOJ announced that a VW engineer had pleaded guilty for his role in the scandal and would cooperate with the government in its ongoing investigation. In the meantime, defense attorneys argue that the influence of the Yates memo may already be visible in a handful of recent cases:

- In January 2016, the former owner and CEO of Bostwick Laboratories agreed to pay at least $2.6 million, and potentially up to $3.75 million, to resolve alleged violations of the False Claims Act, the law that imposes liability on

6 Ways to Avoid Trouble

These basic steps can go a long way in mitigating the personal risks associated with leading the finance organization.

1. Adopt and follow policies, processes, and controls that meet or exceed the standards of the Sarbanes-Oxley and Dodd-Frank acts.
2. Deliver great documentation to internal and external auditors.
3. Create a culture of compliance modeled and championed by the C-suite.
4. Develop a code of conduct, have employees acknowledge in writing that they've received it, and communicate its message regularly throughout the enterprise.
5. Make it easy for employees to report suspected wrongdoing to internal auditors and the board of directors.
6. Require controllers and other financial accounting personnel to certify their work in writing each quarter, and mandate that business managers and sales leaders do the same.

AN OUNCE OF PREVENTION

It starts, of course, with the obvious: adopt policies and processes that meet the standards of the Sarbanes-Oxley and Dodd-Frank Acts, deliver great documentation to auditors, create a culture of compliance, develop a code of conduct, make it easy for employees to report suspected wrongdoing, and require financial personnel to certify their work in writing each quarter.

But even after all that, compliance can be a tricky undertaking across a large organization. Accordingly, veteran CFOs cite a litany of other strategies they're embracing to mitigate the risk of anything going wrong, or, if something does, to prevent it from slipping by them.

At Jabil Circuit, a provider of electronic manufacturing services and solutions that employs more than 160,000 people globally, CFO Forbes I.J. Alexander places immense stock in having a robust enterprise risk management process, which his company has been fine-tuning for years. The process is now embedded deeply into the corporate culture, says Alexander. At network specialist Ciena, CFO Boylan puts special emphasis on controls for revenue recognition, since that's an area shown to be problematic for many companies.

Elsewhere, CFOs are counting on technology for help. Engine and power products manufacturer Briggs & Stratton is in the process of upgrading its ERP system, says CFO Mark Schwertfeger, to provide easier, faster access to clean and reliable data. Having that is critical to reporting and certifying accurate financial results and spotting discrepancies before they become problems. "Information is power," Schwertfeger says, "and it's absolutely critical to keeping your finger on the pulse of things."

Because even the best technology can carry an organization only so far, though, Schwertfeger also relies on smart, talented finance personnel who understand how the com-

"The public expects and demands this accountability. Americans should never believe ... that one's criminal activity will go unpunished simply because it was committed on behalf of a corporation."

U.S. DEPUTY ATTORNEY GENERAL SALLY YATES, speaking at New York University School of Law the day after circulating a memo stating that the DOJ would double down on efforts to hold individuals accountable for corporate wrongdoing

people for defrauding the federal government. The claims were related to Medicare and Medicaid billings originally brought to light by a whistleblower.

• In April, three former district managers at specialty pharmaceutical manufacturer Warner Chilcott pleaded guilty to conspiracy to commit health care fraud and HIPAA violations, after their employer cooperated with the government's investigation.

• In September, the chairman of privately held nursing home operator North American Health Care agreed to pay $1 million to settle allegations of violating the False Claims Act. The company's senior vice president of reimbursement analysis settled too, agreeing to pay $500,000.

• Also in September, the former CEO of hospital operator Tuomey Healthcare System agreed to pay $1 million to settle claims related to illegal Medicare and Medicaid billings. Notably, the settlement required the former executive to release Tuomey from any indemnification claims he may have had against the company.

Whatever the impact of the Yates memo on these settlements—these cases had been underway before it was issued—Stephanie Resnick, chair of the directors and officers liability and corporate governance practice at Fox Rothschild, says, "Being a CFO in today's world certainly subjects oneself to danger."

Which raises the question, what to do about it? No one is suggesting that CFOs leave their jobs. But attorneys, insurance specialists, and CFOs who've thought about the issue agree there are things finance chiefs can do to manage the personal risks associated with leading the finance organization.

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pany works, stay connected with the business, and routinely exercise professional skepticism. This helps them develop reasonable expectations about how the company's numbers should look and a sense for when they might be wrong. It's akin to what Jon Wolk, CFO and treasurer of Mistras Group, an asset-protection company, calls a "two ears, one mouth" approach to running a finance function.

"The best CFOs are terrific business partners," Wolk says. "When you're a terrific business partner, you're both helping to identify and achieve important opportunities and also identifying and mitigating the biggest risks. The first thing you have to do is listen and learn and understand the operating environment."

David Sylvester, senior vice president and CFO of office furniture firm Steelcase, says a flat organizational chart can contribute to a safer environment for CFOs by facilitating the flow of information organization-wide. So can an employee evaluation process that considers both the performance of employees and their adherence to company values. At Steelcase, that twin assessment is incorporated into annual performance reviews that in turn factor into compensation decisions—and, in some cases, continued employment. "When you replace someone who was performing at a relatively high level but didn't play by all the rules we expect our people to play by, it shows employees we're serious about it," Sylvester says.

Sylvester also has made it part of his operating protocol to personally review every issue reported though the company's integrity hotline and to personally attend every disclosure control meeting the company holds before quarterly or annual SEC filings, quarterly calls with analysts, and financial press releases. "I think it's important to understand the things being discussed and vetted about whether disclosure should be at this or that level," Sylvester says.

JOHN J. CARNEY, co-leader, white-collar defense and corporate investigations team, Baker & Hostetler

PURSUING PEOPLE

The following are excerpts from the September 9, 2015, memo of U.S. Deputy Attorney General Sally Quillian Yates, "Individual Accountability for Corporate Wrongdoing."

"... One of the most effective ways to combat corporate misconduct is by seeking accountability from the individuals who perpetrated the wrongdoing. Such accountability is important for several reasons: it deters future illegal activity, it incentivizes changes in corporate behavior, it ensures that the proper parties are held responsible for their actions, and it promotes the public's confidence in our justice system. ... "

"... In order for a company to receive any consideration for cooperation under the Principles of Federal Prosecution of Business Organizations, the company must completely disclose to the [DOJ] all relevant facts about individual misconduct. Companies cannot pick and choose what facts to disclose. That is, to be eligible for any credit for cooperation, the company must identify all individuals involved in or responsible for the misconduct at issue, regardless of their position, status or seniority, and provide to the [DOJ] all facts relating to that misconduct. ..."

" ... by focusing our investigation on individuals, we can increase the likelihood that individuals with knowledge of the corporate misconduct will cooperate with the investigation and provide information against individuals higher up the corporate hierarchy. ..."

" ... There may be instances where the [DOJ] reaches a resolution with the company before resolving matters with responsible individuals. In these circumstances, [DOJ] attorneys should take care to preserve the ability to pursue these individuals. ... Absent extraordinary circumstances or approved departmental policy ... [DOJ] lawyers should not agree to a corporate resolution that includes an agreement to dismiss charges against, or provide immunity for, individual officers or employees." ...

Where process and policy aren't enough, good old-fashioned experience can help CFOs navigate risk. Sylvester values his 22 years at Steelcase, including the past 10 as CFO. "I feel like I know our organization, know our culture. I'm not saying it's necessarily better than anyone else's, but I know it and understand it and therefore I can put things in context quickly. You start working for a new company, and in 90 days you have to file your first 10-Q and feel pretty confident about its accuracy. That person certainly has more at risk than the tenured executives in our industry."

LAWYERING UP

What happens when something does go wrong? Historically, a CFO's first call is to the company's general counsel. Today, that won't always be the smart choice. It almost certainly will be the wrong choice if the CFO receives the so-called "Upjohn warning" from corporate counsel, advising that an internal investigation is underway and that corporate counsel represents only the company, not the individual. That CFO will want to retain his or her own counsel.

Many executives appear to be getting the message. Officers of public companies where investigations are underway, Carney says, are reaching out for personal representation more frequently, and sooner in the process, than they were even a year ago. "They're lawyering up—and they need to," agrees Fox Rothschild's Resnick. "They can't simply rely on the company's counsel now."

Carney says he can envision instances in which CFOs merely concerned about how their employer is handling a potentially controversial issue—a revenue recognition matter, perhaps—might want to hire their own counsel to advise on the matter. "If you think it's a risky situation, it is reasonable and fair to ask the company to either allow you to explicitly rely on the advice of the company's general counsel or outside counsel, or allow you to have your own counsel," he says. "The fact that you're arguing on revenue recognition for three hours should make you uncomfortable. One mistake that brings you under the scrutiny of the SEC can ruin your career forever. That's why it's important."

In fact, Carney says, hiring counsel with expertise in the area in question, and taking their advice, can be a nearly absolute defense if authorities later determine that your course of action was illegal. It establishes that you acted in a reasonable and prudent manner.

WHEN ALL ELSE FAILS

CFOs will find that, in most cases, the cost of hiring their own attorney will be covered by their employer, often via the company's directors and officers insurance policy. But not always.

Sarah Downey, D&O product leader with insurance broker Marsh USA, recommends that CFOs make sure they understand their employer's obligation to indemnify them, which can vary by state and company bylaws. They should also ensure that the company's D&O policy has adequate limits for Side A coverage, which insures losses to officers and directors that are not indemnified by the corporation. "I also recommend that clients look at the severability language in their policy," she continues. "You want to make sure that if an individual is eventually held liable for wrongful conduct, that liability is not imputed to other officers and directors."

LaCroix of RT ProExec adds that CFOs may want to go so far as to negotiate their own, separate, written indemnification agreement with their employer, instead of relying on the indemnification provisions of the company's bylaws or state statutes. Such agreements are more common for CEOs and chairmen, he says, but it's perfectly appropriate for CFOs to broach the topic.

LaCroix also encourages a review of all D&O policy limits in the increasingly fraught legal and regulatory environment in which companies now operate. In an extreme case where multiple officers and directors are hiring their own lawyers, he warns, policy limits can be used up fast.

Steelcase CFO David Sylvester believes a flat organizational chart can contribute to a safer environment for CFOs by facilitating the flow of information organization-wide.

Finally, LaCroix encourages CFOs to be mindful of the language in their D&O policies. Many are worded to exclude coverage for fraudulent or criminal activity, which is fine. But, LaCroix says, it's important that the policy exclude such coverage only after a final, non-appealable adjudication. "If there's a conviction that you want to appeal, you want to be sure the exclusion isn't cutting off attorney's fees right at the time you need them most," he says. "I also like to see the word 'intentional' or 'deliberate' in there, so you don't have mere negligence or even recklessness triggering the exclusion."

It all sounds messy, but that's the point for anybody sitting in the CFO chair, or thinking about it. "If you're offered the CFO job, take it," Carney says. "But understand you are wearing a white linen suit to a picnic—and you can't get a stain on that suit." CFO

RANDY MYERS IS A FREELANCE WRITER BASED IN DOVER, PA.

Courtesy Baker & Hostetler, Steelcase

Does the thicket of banking regulations threaten the viability of financial institutions? Four experts weigh in on the issue.

Looking for Regulatory Relief

EDITED BY VINCENT RYAN

With the new president of the United States planning to push Congress to "dismantle" the Dodd-Frank Wall Street Reform and Consumer Protection Act, some post-crisis banking regulations may be swept away. Is that a good idea?

The U.S. economy needs a healthy, stable banking system to thrive. But banks claim the federal government's post–financial crisis rules have put them in a bind. Lightly regulated "fintech" upstarts are making inroads into markets like consumer lending and wealth management. Meanwhile, the resources financial institutions need to respond, they claim, are wasted on dealing with a flood of federal mandates.

What have post-crisis rules done to banks? They are now well-capitalized and safer, with tons of shareholders' equity. But they have so much that their returns on equity are testing new lows. Beyond that, new regulations

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demand higher liquidity in certain areas of the bank holding company structure. When lots of liquidity is necessary within a particular business or division, it lowers a bank's investment returns.

Those two effects of banking regulation are making a third party anxious: equity investors. Shareholders, banks will tell you, are getting impatient with moribund returns. They're asking a key question: What is going to improve the earnings outlook for financial institutions, beyond dramatically higher interest rates, which don't seem imminent?

That question is also important for federal regulators. At a recent Fitch Ratings banking conference, the topic of regulators' expectations of bank profitability arose. What do regulators believe is an acceptable or healthy level of profitability for a bank? No one provided a good answer, but a government representative did say regulators want to make sure banking companies are viable and long lasting, and that banks have a reasonable cost of capital.

Is post-crisis regulation strangling banks and actually making them less healthy? What changes in regulation—besides or instead of an outright appeal of Dodd-Frank—would make practical sense? Below, four financial services experts tackle those questions. The opinions expressed are their own.

Consider the Intent

Jose Marina, EVP & CFO, TotalBank

While many bankers may immediately respond "yes" when asked if the industry is overregulated, a more relevant answer (or answers) must consider the intentions of the regulations. The purpose of the regulatory structure is three-fold: protect the safety and soundness of the banking system, ensure adherence with consumer compliance laws, and eliminate illicit activity.

Safety and soundness regulations. To evaluate whether this aspect of banking is overregulated, ask one question: *Without the regulations, how would processes and governance change?* For prudently managed banks, I would say, "not much."

Periodically stress-testing capital and liquidity, ensuring a diversified funding structure, managing interest rate risk, implementing an effective internal control system, and establishing strong credit policies are all effective tools to sustain public confidence and, in turn, earnings.

Of course, within the regulatory framework, there exist exercises that are more form than substance. For example, all banks must run +400 bps interest-rate-shock scenarios to identify the impact on net interest margin—even though such a scenario is improbable and decisions predicated on this unlikely occurrence would be misguided. Such exercises create "noise" and take away from analyzing more-realistic scenarios upon which decisions should be based.

Overall, however, risk management practices are pragmatically beneficial and should be employed, regardless of the regulatory structure.

Marina

"As CFOs, we like to let the numbers tell the story, and it is hard to ignore what the numerical trends are telling us about the impact of regulation."

Consumer compliance. Looking at just the evolution of consumer compliance laws since the Great Recession, one could argue that banks are overregulated.

One specific area that has incurred an abundance of new regulatory attention is the residential mortgage market. While we can engage in a subjective debate over the effect of Truth in Lending Disclosures and other rules, it is important to consider facts from the lending side:

- Residential mortgages as a percentage of total loans in all FDIC-insured banks have declined from 31% to 21% over the past 10 years.
- The share of residential mortgages originated by commercial banks has declined from 74% in 2007 to 52% in 2014, according to the Mortgage Bankers Association.

There are also relevant macro trends since Dodd-Frank was signed into law in 2010:

- Only one new bank has opened; before Dodd-Frank, new bank charters exceeded 100 per year for the prior three decades.
- The average asset size of banks has increased by 62% to support the need for scalability, given increasing compliance costs and, admittedly, a challenging interest rate environment.

As CFOs, we like to let the numbers tell the story and, in this case, it is hard to ignore what the numerical trends are telling us about the impact of regulation.

Eliminating illicit activity. While the banking industry plays a critical role in blocking criminals and terrorists from gaining access to the U.S. financial system, enforcement of regulations can be subjective.

Many banks have been "de-risking" by closing higher-risk accounts or exiting certain business segments. While it may make sense for individual banks to de-risk, broad de-risking across the industry can have unintended consequences, such as cutting off vulnerable consumers from accessing credit.

There is no denying that the proliferation of regulation since the Great Recession has affected the finance industry as banks change their business models and emphasize scalability to better absorb the increasing cost of compliance. The industry must work with regulatory authorities and banking associations to ensure the rule-making process adopts a balanced approach as we move forward.

Does Overregulation Lead to Underperformance?

Harold P. Reichwald, Partner, Manatt, Phelps & Phillips

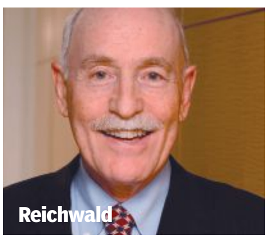
Some years ago I attended a meeting at the Federal Reserve Bank between a delegation of senior bankers from the largest banks in California and a Fed governor who was primarily responsible for bank regulation.

It was a largely formal meeting with very little give-and-take, as those meetings tend to be. However, the Fed governor made a very strong statement that still resonates with me today: He made it very clear that the Fed and its staff saw their main regulatory purpose as "saving the bankers from themselves." In other words, banks could not be trusted to act prudently on their own and needed a strong enforcer of strong rules to safeguard the U.S. banking system.

Since that meeting, much has transpired in the banking world, including a move to deregulation followed some years later by the so-called Great Recession and the inevitable strong and sharp turn to legislation and reregulation.

Regulations have grown and in many ways the business of banking and other financial institutions has become harder and more difficult to manage with consistent profitability. While the regulatory authorities would argue that the heavy regulatory environment, both on paper and in practice, has made the financial world safer, inevitably the business of banking is being adversely affected and innovation is suffering. Here are some examples:

- Overregulation (including heavy-handed bank examinations) stifles creativity and diminishes the attractiveness of the industry as a career choice, which leaves the banks with an ever-diminishing pool of young talent with which to plan and adjust for the future in an increasingly complex business environment.



"The difficulties in getting past all the regulatory hurdles in establishing new banks ultimately reduce the vigor of competition..."

- A regulatory emphasis on de-risking makes boards of directors and senior managers skittish about innovative strategic planning. In an era of rapid technological change, new but prudent strategies are necessary to meet market challenges.
- Overregulation increases the cost of doing business without any demonstrable positive effect on bank profitability because of the need for additional staffing, training, and upgrading of information technology structures and procedures.
- The threat of regulatory penalties and "penalty box" orders for perceived infractions of the regulations, as well as the adverse effect they have on the ability of a bank to expand and grow, makes managers more apt to want to plan merely to the examination process and not to prudent marketplace opportunities.
- The difficulties in getting past all the burdensome regulatory hurdles in establishing new banks ultimately reduce the vigor of competition, which in itself leads to lassitude, making the business of banking less attractive and more utility-like.
- Boards of directors are unsure how to meet their traditional fiduciary duties given the heavy presence of the regulatory agencies as very significant, if not primary, stakeholders in their institutions, which, in turn, dampens investor interest.

There was a time when no self-respecting bank CEO or board member would let a regulator tell him how to run his bank. Those days are long gone, which is not to say that given the importance of banking to our economy there should be no regulations, just that they should be prudent and reasonable. However, unless the regulators lessen their collective hold on the "tiller," banks and other regulated financial institutions run the risk of losing their place of importance in the U.S. economy, for which all of us will suffer.

'One Size Fits All' Doesn't Work

William Stern, Partner, Goodwin Procter

Regulation is essential to ensuring safety, soundness, resiliency, and consumer protection within the banking system. And, since banks occupy a special place in our economy as financial intermediaries that receive the benefits of what is essentially a government subsidiary in the form of deposit insurance, some degree of regulation is needed to guard against the possibility of overly risky behavior that may jeopardize taxpayer dollars.

That being said, there is a sense among community bankers that the current model of "one size fits all" regulation simply doesn't work. Given their smaller size and more limited resources, it's no surprise that smaller institutions disproportionately shoulder the effects of regulation. With a few notable exceptions for institutions that reach $10 billion or $50 billion in assets, most bank regulatory requirements in the U.S. make no distinctions based on the riskiness of an institution's activities or the markets in which it operates.

As an example, banks of all types are required under guidance issued by the federal banking regulators to implement a robust third-party vendor-management program that is commensurate with the operational, compliance, reputational, and other risks arising out of relationships with third parties.

Courtesy the companies

The guidance directs banks to apply more comprehensive and rigorous oversight, both initially and on an ongoing basis, to third-party relationships that involve critical activities, including vendors that process transactions or have access to sensitive customer information. Needless to say, banks devote considerable resources to complying with these requirements.

However, for community banks, the most critical third-party relationship typically involves core processing, often with a national provider that serves banks across the country. So the emphasis on vendor management means that community banks across the U.S. are duplicating each other's efforts to oversee the same vendors that, in many cases, are already subject to examination by the federal banking agencies.

Another example relates to capital requirements. Banks of all kinds are subject to the Basel III capital standards, including the capital conservation buffer and requirements related to calculation of risk-weighted assets and capital. These requirements were adopted following the financial crisis to better match the amount of capital a depository institution must hold with the exposures that it faces; the impact of Basel III has been to significantly increase the amount of capital required in the banking system.


Stern

"We can and should look for opportunities to more closely align the degree of regulatory burden with the riskiness of the bank's business."

FDIC Vice Chairman Thomas Hoenig has proposed regulatory relief from a number of requirements, including the Basel III capital standards and risk-weighted asset calculations, for traditional banks that engage primarily in deposit-taking and lending and do not engage in riskier activities.

Only institutions that do not hold trading assets and liabilities and do not hold derivatives positions other than interest-rate swaps and foreign exchange derivatives would qualify for relief. They would also be required to have total derivatives exposure not exceeding $3 billion of notional value and a GAAP equity-to-assets ratio of at least 10%. While some in the banking industry may question whether the last requirement is properly calibrated, this proposal would break with the current model of applying most bank regulatory requirements to all institutions across the board.

There's no question that we need a strong regulatory regime to keep our banking system safe, but we can and should look for opportunities to more closely align the degree of regulatory burden to which an institution is subject with the riskiness of its business.

The Cost of Compliance

Ruth Razook, Founder and CEO, RLR Management Consulting


Razook

"It is quite common for guidance to be published and become effective at the same time, leaving banks scrambling to implement appropriate compliance procedures."

In 2011, RLR Management Consulting partnered with CBANK Network to survey 300 banks regarding the cost of compliance. In short, the results were surprisingly encouraging. Of the 300 respondents representing banks ranging from $20 million to $13 billion in assets, 47% reported that their compliance department budgets remained the same from year to year, and 46% reported spending less than $10,000 in funding for the compliance department.

However, the Federal Reserve conducted a similar survey in 2015 and, unfortunately, it yielded different results. Respondents to that survey reported that regulatory compliance accounted for 11% of personnel expenses, 16% of data-processing expenses, 20% of legal expenses, 38% of accounting and auditing expenses, and 48% of consulting expenses. These answers imply an annual compliance cost of $4.5 billion, representing 22% of a community bank's net income.

Clearly, the cost of compliance is a heavy burden for community banks, and sadly there is no end in sight for new regulations. Years ago, implementing new bank regulations was a detailed process that included a proposal, edits to the proposal, a published version of the final guidance, and an implementation date. Now, it is quite common for guidance to be published and become effective at the same time, leaving banks scrambling to implement appropriate compliance procedures. And, because of the ease with which regulations can be instated, they just keep coming.

In order for banks to deal with the current overregulation and effectively anticipate what examiners will look for when conducting audits, banks must review public enforcement actions taken against other financial institutions.

For example, last year regulators took action against RBS Citizens Financial Group for failing to credit consumers the full amounts of their deposited funds. Only if a bank had already reviewed the RBS Citizens Financial Group consent order would it have been fully prepared for a related regulation that took effect this past summer.

Financial institutions are definitely overregulated. The best thing that banks can do to protect themselves is to be aware of what is happening in their industry and prepare accordingly prior to regulatory examinations. CFO

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Sensing Change

The Internet of Things is forecast to transform supply chain management, but the use of connected industrial sensors so far points to an evolution, not a revolution. By Yasmin Ghahremani

Late afternoon one Friday in July, Lee Spach, global supply chain security director for biotech firm Biogen, received an alert on his phone. Earlier in the day, a multimillion-dollar shipment of a frozen, highly concentrated biologic substance used for making a new drug had been loaded into a refrigerated truck at Biogen's factory. It was headed for a warehouse 700 miles away. The alert, from a GPS tracking system that Biogen had recently installed, said the truck hadn't moved for 20 minutes. Further investigation showed it was sitting in a church parking lot only a few hours away from its departure location.

This was no rest stop. Spach, along with the company's security and logistics teams, realized the truck was broken down. They called the trucking company, which told them it would take 14 hours to replace the vehicle. That meant the cargo wouldn't get to the warehouse until Saturday morning, when the warehouse would be closed. The dry ice packed in the shipment could keep it cool for 72 hours, but anything longer than that would put the cargo's quality at risk.

"We were able to intervene and send the shipment in the replacement truck back to the plant, where we could keep it cold for the weekend," says Spach. "If we hadn't gotten involved, the truck would have arrived at the warehouse Saturday when no one was there to receive it."

Biogen's experience is just a small example of how the Internet of Things (IoT) is expected to transform supply chain management. The big vision is much grander, and involves joining sensor information with relevant customer, supplier, and vendor data, and then letting computers automatically optimize a company's supply chain. "I don't know of any company that's doing that," says Dave Padmos, global technology sector leader at Ernst & Young.

But organizations across different industries are taking steps in that direction and are already finding value. Advances in sensor and battery technologies, wireless networks, and analytics software are helping companies get real-time information about where their goods are, when they're going to arrive, and what condition they'll be in. "Because the costs of those technologies have plummeted, it's now economically credible that we'll end up connecting pretty much anything you can think of," says Ben Salama, managing director at Accenture Digital.

It's still early days, but 44% of executives polled in 2016 by MHI—the trade association for the materials handling, logistics, and supply chain industries—are already using sensors and automatic identification technologies.

From Latent to Real Time

Sensors and tracking systems are not new to supply chain management. But traditionally, they've divulged their data only at certain points along the supply chain. For example, once a radio-frequency identification (RFID) tag or barcode is scanned, it can tell a manufacturer where a part is in its warehouse or that a shipment has arrived at port. A data logger, in another example, can reveal what the temperature range was inside a refrigerated compartment once the compartment is opened.

Those tools are helpful, but many companies want real-time tracking capabilities for assets and inventory. They tend to be organizations that handle high-value or time-sensitive goods. "The sweet spot is where the cargo is not a commodity: in life sciences; in engineering and manufacturing of sophisticated devices such as engine components; and in capital equipment, such as semiconductors," says Ricardo Bartra, chief information officer of DHL Global Forwarding.

Sometimes the tracking begins at the manufacturing level. GE Transportation is embedding sensors in assets and products, and using software to gather data that helps improve performance and productivity. Its "Brilliant Factory" program puts what GE calls a "digital thread" through operations to see performance and output in real time. "We're connecting everything through the digital thread, from concepts to engineering and design, to manufacturing, sourcing, assembly and

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through to repairs," says Greg Sbrocco, general manager of global supply chain at GE Transportation.

The company's Grove City, Pa. plant, which makes locomotive engines, is one of seven showcase facilities. Sensor-enabled equipment is visible on screens throughout the plant, so machine operators and managers can see in real time how a machine is performing and head off problems before they cause major shutdowns. Optical recognition systems on the assembly line can detect when components are being assembled too slowly or in the wrong order. Smart tools eliminate assembly mistakes by, for instance, sensing when proper torque values are achieved.

All of these improvements have led to a 10% to 20% reduction in unplanned downtime and have boosted productivity by as much as 15% in certain parts of the factory.

GE Transportation is also automating collection and storage of information about every part made in the plant. "We're creating a 'digital twin' of every component in the factory—recording the genealogy and history about how that part was designed, built, operated, and repaired. It's a replica of everything that went into that part from its creation to how it operates," says Sbrocco. Over time, this information unlocks critical insights to help engineers design and fix parts.

In-Transit Visibility

Logistics managers are turning to IoT solutions to improve in-transit visibility and eliminate blind spots at ports, railroad depots, and airports—wherever goods are transferred between transportation modes or carriers. The Electronic Data Interchange (EDI) system currently used in supply chain communications gives information about goods only at certain chokepoints. It also processes messages in batch mode, meaning there is a lot of latency in the system.

IoT solution providers say it doesn't have to be that way. "We're replacing milestone data points that say, 'Here's where your goods were at this point in time,' with, 'Here's where your goods are right now and here's what's happening to them,'" says Jim Hayden, senior vice president of data science and solutions at Savi Technology, the company that provides the solution Biogen uses.

Brooks Running has been dipping its toe into these waters. The shoemaker's problem was that it was receiving just two status updates from its EDI system: once when its products left port in Asia and another when they arrived at the destination port in Seattle. It was relying on the estimated time of arrival the carrier gave it upon departure, and it sometimes wasn't notified the shipment had actually arrived until the cargo had been sitting in port for two days.

Supply chain visibility manager Chase Mueller says he needed better visibility to more effectively plan downstream operations, optimize lead times, and measure carrier performance. "All I really want to know is when the boat is going to be here and when is the earliest point in time that I can have information that is reasonably accurate about the estimated time of arrival" (ETA).

Using an IoT solution from Transvoyant, Brooks now gets accurate ETAs 9 to 10 days in advance. Transvoyant uses a big data approach, taking the information from Brooks' bill of lading and then tracking the cargo vessel using satellite and radar data. It also factors in data it collects on weather, wave heights, unscheduled port stops, and customs clearance times. "We collect more than one trillion big data events around the world every day," says Transvoyant's vice president of marketing, Scott Byrnes.

All of this information is processed with advanced machine learning algorithms to produce precise arrival time estimates for Brooks' shipments, according to Byrnes. The algorithms are recalculating as the shipment progresses, so the company can detect a disruption as it unfolds. For example, a ship may begin to change course during its journey, indicating an unscheduled port stop. "In that instance, we recalculate the ETA to the final destination, factoring in the predicted time it will take the vessel to complete the unscheduled stop," says Byrnes.

Within three months of implementing the Transvoyant solution, Brooks had achieved a return on investment by reducing transit lead times by 14% on shipments from China and by 7% on shipments from Vietnam. Cutting lead times means Brooks has to carry less inventory to meet purchase order deadlines and can respond more quickly to the market.

Mueller plans to expand use of the solution to all of the global transit lanes the company uses. Once he has a solution in play for ETA globally, he hopes to get more value and visibility via various micro-projects focused on other lead times, such as the time

IoT Everywhere?

Accenture projects healthy growth for the Internet of Things ecosystem in the next four years.

212 billion
Sensors expected

50 billion
Devices connected

2.5 billion
Connections accessing 4G-LTE networks

Source: Accenture Digital

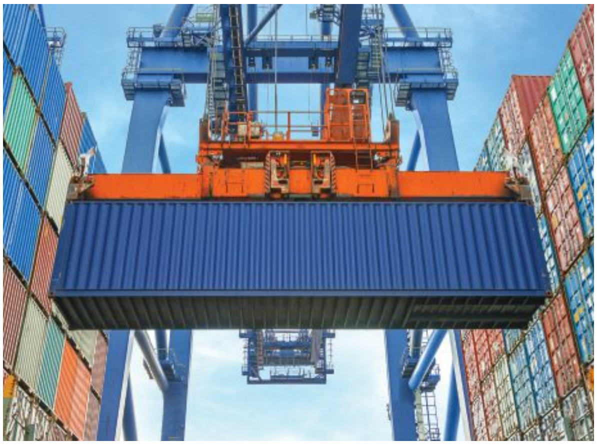
it takes to move cargo from individual factories to the various ports of departure, or from the ports of arrival to distribution centers.

Further down the road, Mueller is interested in how he can tap Transvoyant's capabilities in other parts of the supply chain. The vendor got its start helping U.S. agencies detect and avoid national security risks, and says it now knows the location of every air, sea, road, and rail shipment. With all that data, its software can, for example, look at a shipping route a company is considering and, based on the predicted weather, wave heights, and port congestion, suggest an alternate route if warranted.

Security and Integrity of Goods

Beyond getting cargo moved faster and more predictably to its destination, some IoT users are interested in making sure their cargo gets there at all. Biogen's primary motivation in seeking an IoT solution was deterring theft of inventory at airports and on roads around the world. Theft costs shippers and logistics providers billions of dollars each year, including not just the cost of the goods stolen, but the knock-on effects of inventory delays. The Biogen truck that broke down in July was carrying raw materials for a drug that was ultimately destined for a clinical trial. If the shipment had been delayed it could have slowed regulatory approval and eventually the market launch of the drug.

By tracking its shipments and receiving alerts if they go outside a designated geographical "fence," Biogen can work with law enforcement officials to try to recover any stolen goods. "Having eyes on such valuable cargo in unsecure locations in real time is good for us, especially in more high-risk cargo theft areas of the world," says Spach.



Logistics managers are turning to IoT solutions to improve in-transit visibility and eliminate the blind spots that occur when goods are transferred between transportation modes or carriers.

Like many life sciences companies, temperature monitoring is also very important to Biogen. In November, it began a pilot using sensors to receive real-time temperature information. If Biogen gets an alert that there's been a temperature spike, for instance, it can notify the carrier and try to have the problem fixed before it's done irreparable damage to the cargo.

Getting Started

Experts suggest that, before launching an IoT initiative, companies first decide what their business problem is and then figure out whether and how an IoT solution can help. "Think through the use cases and benefits associated with what you're trying to achieve before you get involved with the technology," says Accenture's Salama. "Put together a few fast pilots and see what the results are."

He adds that he would always recommend buying versus building solutions, because technologies are changing so quickly. "You don't want to spend a lot of money and time trying to build things when the technology might be superseded," he says.

A proof of concept can be implemented within a couple of weeks and a pilot within a couple of months, according to Ashish Chona, senior vice president of IoT software solutions at Orbcomm.

Measuring the return on an investment in IoT solutions depends largely on the use case and implementation. Savi promises that customers see value within 60 days, much quicker than with an ERP system. For Biogen, saving that single multimillion-dollar shipment that became stranded paid for its Savi cloud subscription and all of the sensors it had purchased for six shipment routes. "For us, it's a no brainer because the value of our products is so high," says Spach.

Not So Fast

Plenty of challenges remain before the vision of automatically optimized supply chains is realized. In the MHI survey, 43% of respondents said the major obstacle to adoption of supply chain innovations was lack of a business case that could justify the investment. As one potential customer told Savi's Hayden, "As long as [shipment data] is accurate within a day or two that's OK. I don't know what we'd do with more accurate data."

A commonly cited obstacle to change raised in the MHI report was a cultural aversion to risk (35%). Even simple solutions require process changes. Another notable challenge surrounds privacy and data security. With so many devices talking to each other, the potential for privacy violations or security breaches is massive. Information about how much a company is shipping and even exactly what it's shipping is valuable to outsiders.

"If anything can dampen this it's security," says Chona. Because "customers are very concerned," it's an issue that will have to be addressed as the industry inches forward. CFO

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Funding The Best Growth Path

As capital gets expensive, CFOs make plans for securing and spending what they will need to grow. By Josh Hyatt

62%

Percentage of executives who believe their ability to increase capital spending depends on the finance function's skill at boosting working capital efficiency

For finance executives, the binge on borrowing may be nearing its end. And they know it.

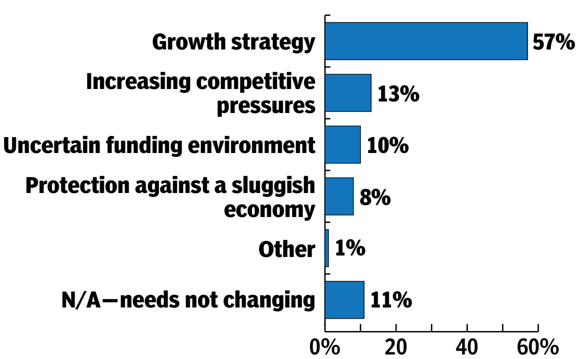
In recent years, as interest rates drifted to record lows, companies craving liquidity didn't have to look far. The low cost of debt, as benchmarked against historical standards, and the easing of lending standards meant stable companies with sturdy banking relationships could leverage that rapport into cheap loans.

What's changing? As it turns out, both sides of the equation are recalculating their positions. On the banking side, the Federal Reserve's more-cautious-than-expected approach toward raising rates has tightened margins even as post-downturn reforms require financial institutions to hold more capital against loans. More recently, troubles in the massive energy sector have added to banks' skittishness, drilling the fear of loan defaults into them.

But determined finance leaders aren't likely to be deterred from looking for capital to fund their ambitious growth plans. In a recent survey conducted by CFO Research, in collaboration with TD Bank, finance executives reaffirmed their intention to "invest aggressively for long-term growth," as one respondent puts it. Their objectives include seeking to "gain market share in emerging markets" and using additional liquidity to fund a "strategy to be more competitive." One survey-taker succinctly summed up his company's two-pronged plan for deploying new capital: "Acquisitions for growth. Capital investments in factories."

FIGURE 1

Which, if any, of the following factors do you see as most likely to change your company's liquidity needs over the next two years?



Note: only one response allowed

The survey, which drew responses from 209 U.S.-based senior finance executives, explored their funding strategies and preferences, as well as identified their priorities. The respondents were evenly split between those representing middle-market companies (with annual revenues between $10 million and $250 million) and those from larger organizations (with sales above $250 million).

In addition to describing the challenges that their own companies face, respondents hinted at shifts they detect in the wider economic landscape. "Currently out of cash and the bank will lend no more," writes one finance executive, answering a question about possible changes in cash-management strategy. "In an environment of such a minimal return on excess funds," writes another, "it feels foolish to hold cash."

CHANGING INTEREST

While the Fed's actions may eventually change that calculus around excess cash, they are not likely to deter finance executives at middle-market or large companies from aggressively chasing growth. In the survey, about three-quarters (74%) of respondents say they expect their company's liquidity needs to increase over the next two years. The reason? They'll need the funds to exploit the kind of business opportunities that will propel and sustain growth.

In fact, a majority of survey-takers (57%) cite their appetite for support-

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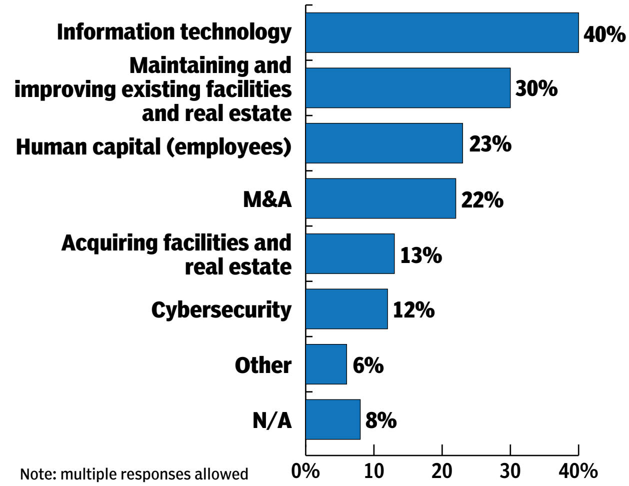
FIGURE 2

What do you expect to account for the largest increases in your company's capital spending over the next two years?



ing growth as the key factor in their company's desire to load up on liquidity. Other possible reasons, such as increasing competitive pressures and the uncertain funding environment, drew much smaller numbers of survey respondents—13% and 10%, respectively (see Figure 1). And only 8% of respondents said they would need liquidity to protect against a sluggish economy. The survey-takers, it seems, have clarity regarding their reason for needing capital. As the CEO of a private equity firm explains: "We see many interesting opportunities, and the greater our investible capital, the more transactions we will conclude."

The movement in interest rates—no matter how gradual it may be—means that finance executives must focus on funding sources other than debt, which will rise in cost. That shift in mindset is reflected in the survey; respondents know they need to turn their attention to the hard work of boosting working capital performance, optimizing areas such as inventory, payables, and receivables. In other words, companies need to look at internal sources of cash rather than relying on external lenders. But it won't be easy: According to The *CFO*/REL Working Capital Scorecard (see the July 2016 issue), last year the amount of time cash was tied up in working capital increased by 7%—or 2.4 days—among the largest nonfinancial companies. So it's no surprise that more than half of respondents (55%) to the CFO Research survey say their organizations will need to make substantial improvements in working capital efficiency over the next two years.

Currently, only one in five survey respondents (20%) say that all their companies' liquidity needs are met through working capital. A much higher number of survey-takers, about 6 in 10 (61%), report that working capital is the source of 75% or more of their liquidity. But CFOs realize they may need to up those numbers. In fact, 62% of respondents say they believe that their companies' ability to increase capital spending over the next two years depends on the finance function's skill at boosting working capital efficiency.

In terms of which dimensions of working capital they plan to focus on improving, 60% of respondents set their sights on receivables, where upgrades in days sales outstanding (DSO) can reduce costs, optimize cash flow, and alleviate risk. Respondents also identified the factors that they expect will play a critical role in improving working capital efficiency. Among the responses, those cited by more than half of respondents included internal process improvements (83%), better information management (81%), additional investment in IT and data processing (70%), increased use of electronic payments (64%), and greater electronic integration with supply chain partners (52%).

Funding organizational growth requires streamlining processes, supporting speedier access to information, imposing tighter controls, and abolishing bottlenecks. In other words, companies need to invest in—and implement—technology.

MORE SPENDING ON TECH

Among survey respondents who expect their company's capital spending to increase over the next two years, technology is a priority. A plurality of those respondents, 40%, report that information technology is expected to account for the largest increase in capital spending. Another 12% specify cybersecurity as targeted for investment—a proportion that is likely to grow with the spread of such innovations as the Internet of Things (see Figure 2).

As for the scale of their anticipated IT spend, slightly more than one-quarter of respondents (27%) say they expect capital investment in IT systems and applications to increase by more than 10% over the next two years. As one CEO writes, describing the magnitude of the IT challenges ahead of him: "This company is two generations behind in its application of technology to business problems, whether day-to-day business activities or products for production and delivery of data." Other respondents cite a variety of technology-related needs, including, most prominently, upgrading or integrating information systems infrastructure or enterprise resource planning systems.

As focused as they are on ramping up technology, respondents are also cognizant of the importance of investing in employees with relevant skills. "Properly-skilled IT professionals," as one respondent notes, "have been among the more difficult employees to recruit." And, after all, technology alone isn't enough to make the smart decisions necessary to embrace strategic growth. CFO

THE QUIZ

The Year in Review

Financial fallout from the Brexit vote dominated the dialogue in the first half of 2016, and a boorish presidential election captured everyone's attention in the second half. With all that excitement, some developments in the world of finance flew under the radar. Take our quiz for a look back at some of the things we covered in *CFO* in the last 11 months.

1. In our March cover story, we noted that activist funds have outperformed other types of hedge funds in recent years. How much in assets under management did activist funds have at that time?

   A. $78 billion
   B. $122 billion
   C. $150 billion
   D. $220 billion

2. Exchanging cyber-attack information with government agencies and industry peers is critical to thwarting future incidents, say experts. In a survey we covered in March, what did executives say most prevents their company from sharing cyber-attack information post-breach?

   A. Lack of incentives
   B. Lack of trust in intelligence
   C. Anti-competitive concerns
   D. Potential liabilities

3. In September we reported that federal securities class-action suits were on the rise, with 119 new cases filed in the first half of this year. On average, how many cases were filed in the first half of each year from 1997 to 2015?

   A. 58
   B. 89
   C. 94
   D. 105

4. According to our November story on the sluggish IPO market, which tech IPO—at $1.1 billion—was the largest offering (by proceeds raised) year to date?

   A. LINE
   B. Nutanix
   C. Blackline
   D. Quantenna

5. In November we presented the results of a survey on cybersecurity insurance. What percentage of responding companies said they bought stand-alone cybersecurity policies this year?

   A. 35%
   B. 55%
   C. 67%
   D. 80%

6. Terminated M&A deals piled up in 2016, as we reported in July. With only $91 billion in transactions and 957 completed deals, which month suffered a 56% year-over-year decrease in M&A value?

   A. January
   B. February
   C. March
   D. April

Answers: 1-C; 2-D; 3-C; 4-A; 5-D; 6-C

Source: *CFO*

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