**The Pitfalls of Non-GAAP Metrics**

**Lurking within the financial statements and communications of public companies is a troubling trend. Alternative metrics, once used sparingly, have become increasingly ubiquitous and more detached from reality.**

**BY H. DAVID SHERMAN AND S. DAVID YOUNG**

In 2011, Groupon Inc. announced plans for a highly anticipated initial public offering. But enthusiasm for the offering waned when the U.S. Securities and Exchange Commission (SEC) issued a comment letter questioning Groupon’s use of a profit metric it called “adjusted consolidated segment operating income.” To our knowledge, no company had ever used that metric before; it was intended to measure operating profit without including marketing expenses, stock-based compensation, and acquisition-related costs. Management argued that a $420 million loss from operations reported on its 2010 income statement should really be considered a $60 million *gain*.

For decades, companies have used custom metrics that don’t conform to generally accepted accounting principles (GAAP) or international financial reporting standards (IFRS) as supplements to their official financial statements. (Although we use the term “non-GAAP” throughout this article, the arguments we make here apply equally to companies that report under IFRS and the related disclosure of “non-IFRS measures.”) Some common non-GAAP measures include free cash flow, funds from operations, adjusted revenues, adjusted earnings, adjusted earnings per share, adjusted earnings before interest, taxes, depreciation, and amortization (known as adjusted EBITDA), and net debt.

However, it’s not unusual for the alternative measures to lead to problems. Since companies devise their own methods of calculation, there’s no way to compare the metrics from company to company — or, in many cases, even from year to year within the same company. Lately, in the course of examining the financial statements and communications of thousands of public companies in at least a dozen countries, we have seen a troubling trend. Alternative measures, once used fairly sparingly and shared mostly with a small group of professional investors, have become more ubiquitous and further and further disconnected from reality. (See “About the Research.”)

The proliferation of alternative metrics not only poses a problem for investors, but it can also harm the companies themselves by obscuring their financial health, overstating their growth prospects beyond what standard GAAP measures would support, and rewarding executives beyond what can be justified. Board members, top executives, compliance officers, and corporate strategists need to make sure that whatever alternative measures companies use improve transparency and reduce bias in financial reports.

**The Rise of Alternative Financials**

Among large companies, alternative financial metrics have become increasingly common. In 2013, McKinsey & Co. found that all of the 25 largest U.S.-based nonfinancial companies reported some form of non-GAAP earnings.[1](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref1) A survey by PricewaterhouseCoopers similarly found that 95 of the Financial Times Stock Exchange 100 Index companies used some form of non-GAAP measure.[2](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref2) In 2016, Hans Hoogervorst, chairman of the International Accounting Standards Board (IASB), reported in an address to the European Accounting Association that more than 88% of the companies making up the S&P 500 included non-GAAP metrics in their earnings releases. What’s more, Hoogervorst added, fully 82% of those earnings releases that used non-GAAP metrics showed higher profits than they would have with GAAP-based measures and were “clearly designed to present results in a more favorable light.”[3](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref3)

To be sure, there remain some contexts in which alternative financials don’t appear. In the United States, for example, they are generally not included in annual Form 10-K reports or quarterly Form 10-Q filings, which are subject to oversight by the SEC; for those documents, the SEC requires that non-GAAP metrics be reconciled with their closest GAAP equivalent. However, alternative financials are becoming more the norm than the exception elsewhere. Press releases and earnings-call summaries frequently present non-GAAP measures that are increasingly detached from their GAAP-based equivalents. What’s more, reports by third parties that are derived from SEC filings (for example, analysts’ reports and articles in the business press) can — and often do — use non-GAAP measures without reference to GAAP earnings. Recent articles about Groupon, Yahoo, LinkedIn and other companies, for instance, do not mention GAAP losses but do point to non-GAAP *profits*.[4](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref4) In many settings, non-GAAP measures have taken on a life of their own.Top of Form

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**Separating Signals From Noise**

In our view, the least problematic and most justifiable unofficial metrics are those that offer important information that official GAAP metrics don’t provide, such as sales figures. Officially, for example, McDonald’s Corp. is expected to report sales only for its company-owned McDonald’s restaurants and should not include numbers from units owned by franchisees in its consolidated accounts. However, in the belief that some stakeholders will be interested in the combined numbers, the company reports “system-wide sales” in its annual report, which includes sales from both company-owned and franchisee-owned locations. For their part, both Wal-Mart Stores Inc. and Starbucks Corp. track same-store sales and sales growth relative to previous years in order to separate out growth in the underlying business from that created by adding new stores. These are the types of supplementary disclosures that can enhance people’s understanding of a business.

More problematic are custom metrics that suggest an alternate way of counting things that official figures already measure. In many cases, they present an alternative view of earnings by leaving out one or more expenses required by GAAP.

Although alternative financials can provide a useful perspective on a company’s ability to deliver sustainable or repeatable earnings, it is not always clear whether the company’s rationale for using non-GAAP measures is to help people understand the business better or merely to improve the way the business is *perceived*. PepsiCo Inc.’s 2015 annual report offers a good example: The report included a three-page reconciliation of GAAP and non-GAAP information. Even so, some of the explanations were not entirely convincing.

PepsiCo’s net revenues for 2015 were $63 billion, 5.4% lower than the previous year, and some of the company’s profit measures also declined. The revenue decline was at least partly attributable to the strength of the dollar in 2015, which prompted management to argue that “organic revenue growth” — a non-GAAP number that PepsiCo calculates from revenue growth adjusted for, among other things, the effects of foreign currencies and the impacts of acquisitions and divestitures — went up, not down.[5](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref5) The argument might have been stronger had it not been for PepsiCo’s explanations in previous years, which took an entirely different view on adjustments for foreign exchange fluctuations and the impacts of acquisitions and divestitures. In her 2007 letter to shareholders, for example, PepsiCo CEO IndraNooyi pointed to the company’s 12% sales growth based on official GAAP figures. However, that 12% included two percentage points of net revenue growth attributable to foreign exchange effects resulting from a weak U.S. dollar and three percentage points of growth from acquisitions.[6](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref6) In other words, PepsiCo’s non-GAAP “organic” revenues increased by only 7% rather than 12% in 2007. In short, the company’s communications focused on GAAP revenues (in 2007) or non-GAAP revenues (in 2015), depending on which figure sent the more favorable message.

Similarly, companies have been known to adjust their reported earnings to exclude mainstream expenses such as pension costs, regulatory fines, “rebranding” expenses, fees paid to directors, executive bonuses, and severance payments.[7](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref7) As companies have become more brazen, the justifications for using alternative metrics can be more elaborate, as reflected in the following examples involving stock grants, nonrecurring expenses, and unwelcome news.

**Stock Grants**

Between January 2013 and December 2015, LinkedIn reported net operating losses of $180 million in its official income statements. However, management wanted the analyst community to focus on different numbers. So, rather than presenting its losses based on GAAP, the company reported an “adjusted EBITDA” for 2014 and 2015 of $1.37 billion. How? By removing depreciation and amortization charges, and removing the cost of stock-based compensation.

LinkedIn isn’t alone in attempting to separate the effects of stock-based compensation from its financial performance reports. Twitter Inc. has used a similar approach. From 2014 through 2015, Twitter issued shares to employees valued at more than 120% of operating income. By excluding this expense from its earnings calculations, it was able to transform a negative earnings report into positive “pro forma” earnings. Although proponents of this approach concede that stock and option grants have dilutive effects on the company’s other shareholders, they argue that adding such costs back into earnings provides a more accurate picture of what’s happening to the company. Since stock grants are noncash expenses, they argue that the grants are not “real” money.

There are at least two problems with this view. First, although stock-based compensation does not involve a direct cash payment, it does involve an outlay of the company’s shares. Distributing shares to employees means that shareholders will own less of the company. The shares in question could have been sold at the market price, with the proceeds going to the company and, by extension, the existing shareholders. Second, earnings are not supposed to reflect cash flow; rather, they are meant to reflect the company’s performance (with accruals included). Accrual accounting is supposed to show expenses in the period when the related revenues are booked and not necessarily when the cash outflow occurs; we already have a statement of cash flows for that. By excluding noncash obligations, companies fail to tell the story earnings should be telling. Recent studies support the view that non-GAAP earnings measures that exclude stock-based compensation have less predictive power for future earnings than metrics that don’t exclude that expense.[8](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref8)

**Nonrecurring Expenses**

Companies often seek to explain away poor performance by suggesting that particular expenses were “one-time events” that shouldn’t be counted. Restructuring expenses, new product development expenses, and acquisition costs are some of the expenses most often listed as nonrecurring. But when a company frequently acquires other businesses, it doesn’t make sense that the expenses associated with making acquisitions are not factored into the equation.

If a company acquires intangible assets that produce revenues, there are costs associated with producing those revenues. Admittedly, the rules governing how those costs are to be amortized may not be perfect. But calculating the earnings by counting the revenues flowing from the assets while ignoring the costs does not seem logical.

**Unwelcome News**

Corporate managers prefer to report good news and downplay bad news. This tendency is frequently reflected in non-GAAP financial measures. In the energy sector, for example, oil reserves are carried as assets based on world oil prices. When oil prices fall, the underlying value of the reserves will decline; oil companies are then required to reduce the carrying value on the balance sheet to the reserves’ current market value. In accounting circles, this is known as an impairment and reflects a real cost to the company that is included as an expense in its income statements. But some energy companies have in the past few years adjusted their non-GAAP earnings so that they didn’t reflect the asset impairment charges brought on by a decline in oil prices — in effect, attempting to dismiss this bad news.[9](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref9) Does it make sense to exclude such asset impairment charges from earnings without making the opposite adjustment for the earnings windfalls that come from oil price increases? We think not.

This practice of minimizing bad news is not just limited to energy companies. *The Wall Street Journal*reported that 40 companies with initial public offerings in 2014 showed losses under GAAP but profits using non-GAAP measures.[10](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref10) Or consider Vonage Holdings Corp., an internet telephony service provider based in Holmdel, New Jersey. In its 2012 financial disclosures, Vonage talked about “pre-marketing operating income,” which went so far as to exclude certain marketing costs, customer equipment, shipping costs, and direct costs of goods sold from net income. At the very least, such practices may cause shareholders to wonder what the companies are trying to show.

**The Trouble With Alternative Metrics**

The potential risks and difficulties of non-GAAP measures have implications for both investors and companies. Based on our research, we identified several challenges.

**Difficulties in Comparing Performance**

Non-GAAP measures can muddy comparisons between companies involving performance. For example, there is a running debate about whether companies should include the cost of stock grants in their earnings calculations or whether they should remove the cost. One argument for removing the cost is that it’s a noncash expense. The counterargument is that stock options have a cost that should be considered as an expense under GAAP. Microsoft Corp. and many other technology companies report non-GAAP earnings that do adjust for the cost of stock-based compensation. At a conference in December 2016, Frank Brod, Microsoft’s corporate vice president, finance and administration, and chief accounting officer, explained that Microsoft viewed stock options not only as something valued by employees but also as a transaction that diluted the ownership of other shareholders and, therefore, should be included as an expense.[11](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref11)

The question of how to treat stock options is often academic. But it became more real for Microsoft when it acquired LinkedIn at the end of 2016.[12](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref12) Following the acquisition, LinkedIn earnings were no longer recast to exclude the value of the stock options, so it became difficult to compare LinkedIn’s performance pre- and post-acquisition. Since the way non-GAAP performance measures are calculated can change from year to year, executives, board members, and internal strategists should be prepared to use several sources to form a meaningful picture of the company’s performance and make comparisons to competitors.

**Risks in Setting Executive Compensation**

Most executive remuneration packages are based on adjusted earnings. Knowing that even GAAP numbers are subject to earnings management, paying bonuses based on measures selected by executives themselves can be extremely risky for compensation committees. To appreciate the risk, consider the case of BP PLC, the global energy company. In 2015, BP CEO Bob Dudley received compensation of $20 million, an increase from $16.4 million the previous year, despite the fact that the company reported its worst loss ever.[13](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref13) Shareholders were dismayed and expressed their disapproval by voting down the company’s report on director pay, but the shareholder resolution was nonbinding.

**Implications for Stock Price**

A vivid example of what can happen when a company abuses non-GAAP measures came to light in 2016 when the SEC raised questions about the accounting practices of Valeant Pharmaceuticals International Inc., a drug company headquartered in Laval, Quebec, Canada. The SEC noted that, over the course of the previous four years, Valeant had reported GAAP net losses of approximately $330 million yet claimed non-GAAP net income of about $9.8 billion during that four-year period — a difference of more than $10 billion.[14](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref14) The SEC challenged Valeant’s practice of removing acquisition-related expenses, particularly in light of the company’s reliance on large, frequent acquisitions.[15](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref15)

Valeant argued that acquisition expenses were not related to the company’s core operating performance. But the SEC was not convinced, and neither were analysts and investors. The company’s stock price fell about 90% in the months leading up to the SEC announcement. The company finally relented and agreed to stop referring to “core” results.[16](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref16)

**Rules Governing Non-GAAP Measures**

In the aftermath of the Enron and WorldCom scandals, the SEC introduced a set of guidelines on the public disclosure of non-GAAP accounting measures (referred to as Regulation G).[17](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref17) Starting in 2003, companies presenting non-GAAP financial measures were required to (1) give equal or greater prominence to the most comparable GAAP measures, (2) include appropriate disclosures (such as reconciliations between GAAP and non-GAAP figures), (3) label non-GAAP measures properly, and (4) identify adjustments as nonrecurring only when such characterization is justified.

In May 2016, the SEC announced additional guidelines on non-GAAP measures, forbidding their use as the only measure in public communications. In the new rules, companies are prohibited from using bigger fonts for non-GAAP measures than for their GAAP counterparts in public disclosures and from issuing press releases that feature only non-GAAP measures.[18](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref18) In addition, companies are not allowed to include gains in non-GAAP measures if they have excluded losses on similar transactions; this practice has always been frowned upon, but the new guidance makes it clear that such cherry-picking is not acceptable. Companies are also forbidden from creating individually tailored measures that are counter to official GAAP measures, and new restrictions have been placed on the presentation of per-share non-GAAP metrics.

We see the recent changes as a step in the right direction, although it’s too early to know if they will have an impact on corporate behavior. One question has to do with the role of external auditors. Professional standards require auditors to read all information in all documents containing official financial statements and accompanying audit reports to ensure that the official information appearing in the financial statements is consistent with other information the auditors have. But since non-GAAP measures are rarely included in official financial statements, outside auditors are rarely in a position to review this information. However, a growing number of companies have been asking their audit committee to review the measurement and use of non-GAAP measures. Eventually, such audit-committee reviews may become a legal requirement.

Some companies, such as Microsoft,[19](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref19) do ask external auditors to review non-GAAP disclosures. So far, such reviews have served to augment management’s and the board’s confidence in the reasonableness of the non-GAAP measures (and have not generally been visible to external parties). For example, auditors can evaluate whether the composition of the non-GAAP measure is consistent from year to year and accurately reflects the balances in those accounts that are adjustments to GAAP. In cases where the auditor finds discrepancies, management can respond proactively, thereby preventing embarrassing and potentially costly problems resulting from violating an SEC regulation.

**Where Do We Go From Here?**

In the United States, the Financial Accounting Standards Board (FASB) is currently conducting research on whether to improve the information presented in official income statements. The idea would be to develop more precise definitions of operating activities and how to distinguish between recurring and infrequent items. If adopted, such changes could have a profound effect on corporate practices regarding non-GAAP measures.

For example, when a company says that something is a “one-off,” how frequently does it actually occur? Clearly, if a loss (or gain) results from a truly bizarre circumstance, it’s reasonable to call it “nonrecurring.” But we like the idea of defining “nonrecurring” more stringently than the SEC’s current rule (which is once every two years).

How might such a change be enacted? The SEC and other regulators could require that events be considered “nonrecurring” only if the time frame for recurrence is every five years. Although five years is arbitrary, we believe it is preferable to two years because it is closer to the length of a typical business cycle. The SEC could also turn its attention to the definition of a relevant “event.” For example, should a company that is writing down the value of its foreign operations due to currency devaluation and economic uncertainty be able to record that as a “one-off”?[20](https://sloanreview.mit.edu/article/the-pitfalls-of-non-gaap-metrics/#ref20) Or is that uncertainty something that any global company should have to endure (and therefore not be subject to an adjustment in calculating non-GAAP earnings)?

One reason why so many companies use unofficial figures is to track performance at a level of detail that exceeds what is available in the income statement. In response, the FASB and the IASB could offer to include new subtotals on the income statement, in effect establishing official versions of some of the more common unofficial metrics, such as EBITDA. However, that would not address the more customized versions of EBITDA that are sometimes labeled “adjusted EBITDA” (which exclude items management thinks are unrepresentative of operating results). In such cases, comparability and consistency would remain a problem, and would perhaps require statements from management explaining how the metrics were calculated and how they compare with those used in previous years.

Finally, the FASB and the IASB could greatly improve matters by clarifying the way disclosures relating to recurring versus nonrecurring activities are presented. For example, the income statement could be modified to produce a measure of recurring operating income as an official measure, with all of the financial and nonrecurring items appearing “below the line,” after recurring operating income. Such a measure would go a long way toward mitigating the perceived need to produce non-GAAP metrics. We think such changes are not only desirable but plausible over the next few years. And independent of these efforts, there are steps that corporate boards can take now to improve the reliability, credibility, and integrity of their non-GAAP disclosures. (See “The Questions Boards Should Ask.”)

Management and boards have a responsibility to report the performance of the business accurately to shareholders. GAAP and IFRS are the standards for public disclosure for public companies in the world’s major financial markets. Although no standard is perfect, standards provide a foundation for consistent measurement of corporate performance over time and across businesses.

However, although we see arguments for additional constraints and regulations, we believe that businesses should be free to add value to their GAAP financial reports by including non-GAAP measures customized to their particular operations, in much the same way as McDonald’s currently does when reporting systemwide sales.

Management has the right — and even the responsibility — to adopt metrics that enable them to communicate with stakeholders about their corporate performance. But there’s a difference between non-GAAP measures that add value and measures that mislead, deliberately or otherwise. When money-losing companies report robust profits using non-GAAP measures, people may suspect that the intent is to disguise disappointing performance with alternate facts. In many cases, that view will not be wrong.

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