

Measuring Accounting Quality

The SEC is developing a software model to measure the accounting quality of its registrants' filings. Accounting professionals should be aware of the implications.

The value of financial accounting is determined largely by its quality. The central concept of accounting quality is that some accounting information is better than other accounting information at communicating what it purports to communicate. For that reason, accounting quality is of great interest to participants in the financial reporting supply chain. For example, to a reporting entity, better accounting quality can translate into a lower cost of capital. To an investor, better accounting quality can translate into a more-profitable allocation of capital.

In this month's column, I'll provide background information on accounting quality and describe a recent accounting-quality project of the U.S. Securities & Exchange Commission (SEC). I'll also explain the implications of the project for accounting professionals—implications that you may find disturbing.

Defining Accounting Quality

There is no single, widely accepted, specific definition of the

term “accounting quality.” In practice, definitions of accounting quality vary significantly across individuals, projects, and organizations.

Many definitions of accounting quality can be found in published research. Examples include “the precision with which financial reporting informs equity investors about future cash flows” (in the May 20, 2011, article “Accounting Quality, Stock Price Delay and Future Stock Returns” by Jeffrey L. Callen, Mozaffar Khan, and Hai Lu; available at <http://ssrn.com/abstract=1416213>) and “the extent to which accounting information accurately reflects the company's current operating performance, is useful in predicting future performance, and helps assess firm value” (in the April 27, 2010, article “A New Measure of Accounting Quality” by Paul Hribar, Todd D. Kravet, and Ryan J. Wilson; available at <http://ssrn.com/abstract=1283946>).

Although there are many different definitions of accounting quality, they all ultimately serve the same purpose: to enable people to make *value judgments* about accounting information. But how can someone measure the quality of accounting information in or-

der to make value judgments about it?

Approaches to Measuring Accounting Quality

Many different approaches have been used to measure accounting quality, and new approaches are continually being developed. Accounting professionals usually expect measures of accounting quality to be determined directly from the financial information that entities report, as many measures are. For example, one measure of accounting quality is the Beneish model's “M-Score,” which is computed from eight variables that are based on quantitative accounting metrics such as days' sales in receivables. The M-Score quantifies the degree to which an entity's reported earnings are likely to have been manipulated by management.

But measures of accounting quality may be based on information other than the financial information that an entity reports. One such measure is based on the fees that companies pay their external auditors. Accounting quality has also been measured on the basis of forecasts made by securities analysts, who often use reported financial information to forecast the

earnings and cash flows of the companies they follow. The key concepts underlying this measurement approach are that:

- ◆ Analysts' forecasts exhibit varying degrees of accuracy (the difference between the average of forecasted results and actual results) and precision (the "tightness" of the range of forecasted results).
- ◆ Higher accounting quality should result in higher accuracy and higher precision in analysts' forecasts.

By measuring the error (a statistical measure of accuracy) and dispersion (a statistical measure of precision) of analysts' forecasts, it's possible to infer the quality of the accounting information on which those forecasts are based.

Accrual Quality as a Measure of Accounting

One significant general approach to measuring accounting quality is the accrual quality (AQ) approach. Under accrual-basis accounting, which dominates corporate accounting throughout the world, revenues may be recognized independently of cash collections, and expenses may be recognized independently of cash payments. In theory, an entity's operating cash flows should correspond to its accrued revenues and expenses within one operating cycle before or after accrual.

In practice, however, the actual correspondence between an entity's operating cash flows and its accruals varies among entities and over time. For example, cash inflows might not be realized from revenues that are recognized on an

accrual basis; that is, accrued revenues might exceed cash actually collected. Also, cash outflows for servicing warranty claims might not match warranty expense that's recognized on an accrual basis; in other words, accrued estimates of warranty costs might exceed cash actually paid for such costs.

AQ approaches focus on the degree of uncertainty in an entity's cash-flow-to-accrual correspondence. Conceptually, the more variability there is in the correspondence between an entity's accruals and its cash flows over the entity's operating cycle, the lower the entity's AQ and therefore the lower the entity's accounting quality. Extensive research on AQ approaches to measuring accounting quality has led to widespread acceptance of such approaches, which brings us to a significant development in the measurement of accounting quality.

Measuring Accounting Quality: A Practical Application

In September 2009, the SEC established a Division of Risk, Strategy, and Financial Innovation (RSFI) to "integrate financial economics and rigorous data analytics into the core mission of the SEC." The Division is involved in the entire range of SEC activities, including policy making, rule making, examination, and enforcement.

For the past several months, the RSFI Division's Office of Quantitative Research (OQR) has been developing an Accounting Quality Model (AQM). The SEC intends to use the model to:

- ◆ Analyze registrants' financial data to assess risks and performance relative to peers,

- ◆ Detect anomalies ("outliers" that "stick out from the pack"),
- ◆ Create risk profiles for registrants, and
- ◆ Allocate investigative resources.

The primary focus of the AQM is on detecting earnings management, whether through fraud, accounting in violation of Generally Accepted Accounting Principles (GAAP), or accounting in accordance with GAAP. The model is based on an AQ approach to measuring accounting quality—one that views an entity's accruals as the difference between its "free cash flows" and its "income before extraordinary items."

Unlike other AQ approaches, however, the SEC's AQM distinguishes between two kinds of accruals. *Nondiscretionary* accruals are made in strict adherence to GAAP requirements and are relatively objective. *Discretionary* accruals result from management's exercise of accounting judgment and therefore are more subjective than nondiscretionary accruals. Further, the AQM assumes that:

- ◆ It's possible to discern the effects of earnings management by examining an entity's discretionary accruals.
- ◆ Discretionary accruals that differ significantly from those of a reporting entity's peers are a strong indication of earnings management.

Once it's fully developed, the AQM will take the financial information that's filed by SEC registrants in eXtensible Business Reporting Language (XBRL) and

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take three steps: First, the model will identify the discretionary accruals in the filed information. Second, the AQM will assess risk factors associated with the discretionary accruals, including factors that indicate earnings management as well as factors that induce earnings management (in other words, factors that indicate the existence of incentives to manage earnings). Third, the model will use the discretionary accruals and risk factors to identify registrants that appear to be managing earnings most aggressively.

Implications and Outlook

The development of the AQM is completely consistent with the SEC's mission of protecting investors and ensuring fairness in U.S. capital markets. But the model will have potentially significant—and potentially adverse—implications for accounting professionals who prepare and audit the financial information issued by SEC registrants:

- ◆ If effective, the AQM will detect misstated financial information that preparers and auditors will have failed to prevent and/or detect. *In essence, the model's initial success hinges on finding fault with preparers and auditors.*
- ◆ Because the AQM could legitimately be considered more objective and/or more independent than human auditors, its success could threaten the traditional role of auditors in the financial reporting supply chain. *Thus, the model's success*

could lead to structural change in the auditing profession.

- ◆ The automated nature of the AQM could significantly reduce the elapsed time between a registrant's filing and the SEC's issuance of a comment letter on the filing. *This would, in turn, increase time pressures on preparers to prepare for potential challenges by the SEC.*

At first, these implications may not appear to offer any “upside” for accounting professionals who work for or with SEC registrants. But I believe that, to the extent the AQM succeeds at measuring accounting quality, it will create strong incentives for registrants to *improve* accounting quality. Those incentives would, in turn, create opportunities for accounting professionals to lead the way in improving accounting quality. And longer term, the absence of comment letters from the SEC will become a more meaningful, positive measure of preparers' and auditors' competence and trustworthiness than it is today.

The SEC plans to implement the AQM by the end of 2013. If successful, the model could be adopted by other regulators throughout the world. At a minimum, I encourage you to be aware of the impact that this initiative may have on you, your work, and your career. **SF**

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