Achieving Excellence
in Financial Reporting and Auditing
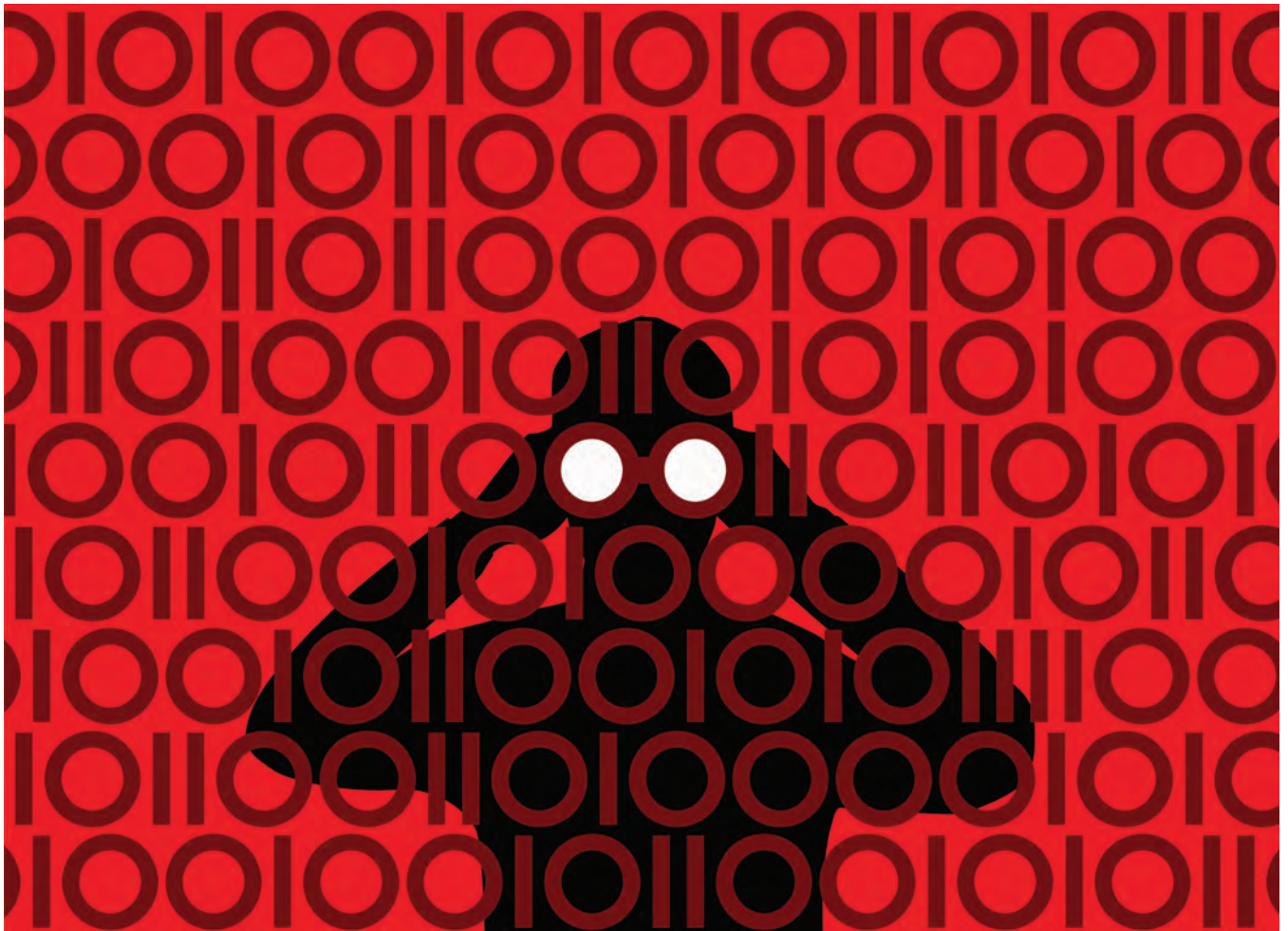
IN FOCUS INTERVIEWS

Leslie F. Seidman

Cynthia M. Fornelli

+

Analysis of PCAOB Inspections

Standards Overload

SEC Focus on Fraud

The SEC's Renewed Focus on Accounting Fraud

Insights and Implications for Auditors and Public Companies

By Douglas M. Boyle, James F. Boyle, and Brian W. Carpenter

The SEC's introduction of a state-of-the-art accounting quality model (AQM) has initiated a new era for the detection of accounting fraud and improper disclosures. Craig M. Lewis, the director and chief economist of the SEC's Division of Economic and Risk Analysis, described the AQM as a robust tool capable of providing quantitative analytics across the SEC in order to assess and identify anomalies in the financial statements of a registered company ("Risk Modeling at the SEC: The Accounting Quality Model," speech on Dec. 13, 2012, to the Financial Executives International Committee on Finance and Information Technology, http://www.sec.gov/News/Speech/Detail/Speech/1365171491988).

Some have coined the term "Robocop" for the AQM. One *Financial Times* article noted that this early warning system "is one of the boldest uses so far of the computer-readable 'XBRL [Extensible Business Reporting Language] tags' and is expected to be rolled out this year" (Adam Jones, "SEC to Roll Out

'Robocop' Against Fraud," Feb. 13, 2013). XBRL tags are used to identify financial data included in typical long-form financial statements and related note disclosures.

The SEC initiated a program phasing in the required use of XBRL tagged data in 2009 (SEC Release 33-9002, "Interactive Data to Improve Financial Reporting"). The use of XBRL tags enhances access to and analysis of financial data by investors, analysts, journalists, and SEC staff. In the case of the SEC's AQM, these XBRL tags provide the foundation for a renewed, high-tech emphasis on the detection of fraud and other accounting irregularities. Computerized analysis of this tagged information significantly improves the efficiency and speed of the examinations of filed data. One recent article highlighted these capabilities of the AQM, noting that the model "is a fully automated system that effectively takes a firm's filing the day it comes in, processes it, and then keeps it in the database so that somebody who is interested in looking at a report on that company would be able to do so within 24 hours of the filing being posted on EDGAR [Electronic Data-Gathering, Analysis, and Retrieval system]" ("Q&A with an Expert: The SEC is Developing Tools That Use XBRL Data to Discover Accounting Anomalies and Improve Financial Disclosure," *Dimensions: The Compliance Authority*, Apr. 2013, p. 3).

The article "Accounting Fraud Targeted" notes that, in the SEC's 2003–2005 financial years, accounting fraud and improper disclosures accounted for more than 25% of the agency's civil enforcement actions, as compared to only 11% in its most recent financial year (Jean Eaglesham, *Wall Street Journal*, May 27, 2013). The author attributed this sharp decline to the SEC's required focus on the financial meltdown, which has since waned.

But several signs now indicate that the SEC has refocused its resources on accounting fraud and disclosure. As Eaglesham noted, "The decision to hunt for wrongdoing by Main Street, as well as Wall Street, puts America's corporations in the SEC's cross hairs." One outcome has been the recent formation of a Financial Reporting and Audit Task Force, a team of enforcement attorneys and accountants working in collaboration with several SEC offices to focus on accounting fraud, dis-

closures, and audit failures ("SEC Announces Enforcement Initiatives to Combat Financial Reporting and Microcap Fraud and Enhance Risk Analysis," SEC press release 2013-121, Jul. 2, 2013). This increased emphasis clearly positions the AQM as a key component of the initiative, noting that the task force would "focus on identifying and exploring areas susceptible to fraudulent financial reporting, including on-going review of financial statement restatements and revisions, analysis of performance trends by industry, and use of technology-based tools such as the Accounting Quality Model." According to the chair of the SEC Financial Reporting and Audit Task Force, David Woodcock, "Regulatory oversight cannot remain at rest. … If we do what we did in the past, if we continue operating as if everything is OK, that's when trouble comes" ("What Accounting Fraud Risk Factors Will Attract SEC's Attention?," by Ken Tysiac, *Journal of Accountancy*, Dec. 13, 2013).

Given this increased emphasis on the detection of fraud and disclosure anomalies, it is critically important that directors, audit committee members, and auditors develop a better understanding of the AQM and its key variables in order to improve financial reporting, disclosure, and audit quality. This understanding will also enable these governance players to better respond to a potential SEC inquiry.

Although the SEC does not publish the key variables considered in the AQM in order to maintain its effectiveness as a surveillance tool, academic literature on earnings management and detection models, combined with recent interviews and presentations made by Lewis, offer valuable insights. This discussion explores these insights and provides practical implications and useful resources for directors, audit committee members, and auditors to consider in their future governance activities.

Findings from Recent Interviews and Speeches

Exhibit 1 summarizes some key findings based on the authors' review of recent interviews and speeches given by Lewis. In December 13, 2012, Lewis referred to the Jones model, which is widely used by accounting academic researchers to identify the existence of potential aggressive earnings management practices ("Risk Modeling at the SEC," speech to the

Financial Executives International Committee on Finance and Information Technology). The Jones model assesses risk by estimating the extent of discretionary accruals included in an entity's financial reports. In contrast to nondiscretionary accruals, discretionary accruals are typically subjective, involve a degree of accounting judgment, and may or may not comply with GAAP. Essentially, the Jones model uses the change in revenue and total fixed assets as variables to predict the level of nondiscretionary (normal) accruals. Changes in total accruals beyond the predicted nondiscretionary accruals are considered discretionary (abnormal) accruals.

> It is critically important that directors, audit committee members, and auditors develop a better understanding of the AQM in order to improve financial reporting, disclosure, and audit quality.

Exhibit 2 provides a summary of the Jones model and the modified Jones model. Under these models, discretionary accruals may either increase income (e.g., reducing the year-end allowance for uncollectible receivables) or decrease income (e.g., increasing the estimated year-end defined benefit pension plan liability). In addition, discretionary accruals may either be revenue related or expense related. An example of a revenue-related discretionary accrual would be the estimation of the amount of revenue to recognize on construction projects in progress. An example of an expense-related discretionary accrual would be the accrual of

estimated warranty expense from current-period merchandise sales.

Under these models, potential earnings management is identified in both directions (i.e., understatement and overstatement of earnings) based upon the level of discretionary accruals. This dual direction consideration is important for auditors to understand, because testing at the accounting level is often performed in only one direction (e.g., testing liabilities for understatement and assets for overstatement). As a result, auditors should consider testing all significant variances, regardless of whether they potentially understate or overstate earnings.

The AQM seeks to identify outlier discretionary accruals that might provide evidence of potential attempts by management to manipulate or smooth earnings through the use of judgmental and subjective accounting choices. Lewis explained in his aforementioned speech, "Risk Modeling at the SEC," that the AQM

EXHIBIT 1
The SEC's Accounting Quality Model (AQM): Identifying Outlier Discretionary Accruals

Examples of Risk Indicators	Examples of Risk Inducers
■ The recording of more bad debt expense in a profitable year and less bad debt expense in a loss year to smooth earnings ■ Accounting policy that results in relatively high book income and low taxable income ■ Accounting policy with a high proportion of off–balance sheet transactions ■ Frequent changes in auditors or delays in the release of financial statements or earnings	■ A company losing market share ■ A company less profitable than its competitors ■ A company experiencing transient performance problems

Precursors of the AQM
Companies have strong incentives to manage earnings because 1) investors respond to earnings announcements and 2) earnings management by the company influences market information about the firm's future performance and investment prospects. Earnings management is manifested in the discretionary choices that management can make under GAAP when reporting its financials.

Filers Flagged with High Risk Scores by AQM
■ Receive higher priority in the scheduling of an SEC examination
■ Generates customized reports that help identify areas of focus

Key Definitions
AQM—a model that provides a set of qualitative analytics that could be used across the SEC to assess the degree to which a registrant's financial statements appear anomalous (i.e., "stick out from the pack" of industry peer companies).

Total accruals—the difference between net income and free cash flows (i.e., what accountants recognize as revenue and expenses and the actual cash flows available to shareholders). Total accruals consist of discretionary accruals and nondiscretionary accruals.

Discretionary accruals—these may be subjective and require considerable accounting judgment. Management's influence over the accruals' values can provide opportunities to smooth income and manage earnings.

Nondiscretionary accruals—accounting adjustments made in strict adherence to GAAP and are relatively objective.

Risk indicators—factors that are directly associated with earnings management.

Risk inducers—factors that are associated with strong firm incentives to manage earnings.

Note:
Information obtained exclusively from comments by Craig M. Lewis in the following sources:
■ "Q&A with an Expert: The SEC is Developing Tools That Use XBRL Data to Discover Accounting Anomalies and Improve Financial Disclosures," *Dimensions: The Compliance Authority,* April 2013
■ "Risk Modeling at the SEC," speech by Lewis to the Financial Executives International Committee on Finance and Information Technology, Dec. 13, 2012

allows discretionary accrual factors to be part of the estimation of total accruals and, thus, extends the traditional Jones model approach to identifying earnings management practices. Lewis further elaborated:

Specifically, we [the SEC] take filings information across all registrants and estimate total accruals as a function of a large set of factors that are proxies for discretionary and nondiscretionary components. Further, (the SEC) decomposes the discretionary component into factors that fall into one of two groups: factors that *indicate* earnings management or factors that *induce* earnings management. Discretionary accruals are calculated from the model estimates and then used to screen firms that appear to be managing earnings most aggressively. (Lewis 2012)

It is important to remember that the goal of the AQM is to identify outlier discretionary accruals—that is, those that "stick out" from a firm's list of peer companies. In this 2012 speech, Lewis noted that "outlier discretionary accruals can be a powerful indicator of attempts to manage earnings." Furthermore, the AQM is able to quickly compare the financial data of peer companies by accessing the SEC database of XBRL public company financial report filings. This enhanced accessibility of financial data was one of the intended benefits of XBRL tagging, as illustrated by FASB's taxonomy, which notes the resulting increase in "the transparency and accessibility of business information by using a [XBRL] uniform format." Exhibit 1 includes examples provided by Lewis of earnings management risk indicators and risk inducers, precursors of the AQM, information related to filers flagged with high-risk scores, and key definitions used in the AQM.

Informing the AQM's Selection Process

The origin of the current SEC division overseeing the development of the AQM can be traced back to 2009, when the SEC reorganized several of its divisions to create what was then called the Division of Risk, Strategy, and Financial Innovation ("SEC Announced New Division of Risk, Strategy, and Financial Innovation," SEC press release 2009-199, Sep. 16, 2009). In June 2013, this division changed its name to the Division of Economic and Risk Analysis. Lewis underscored the newly renamed division's commitment to risk analytics, stating that the division's new name reflects its twin goals to provide "robust and transparent economic analyses in support of Commission rulemaking and policy development, and enhance data-driven risk analytics to help focus the agency's resources on matters presenting the greatest perceived risk" ("SEC Renames Division Focusing on Economic and Risk Analysis," SEC press release 2013-104, Jun. 6, 2013).

When commenting on the AQM in his 2012 speech, Lewis emphasized that the model's classification process "should be informed by staff experience, intellectual capital, and the substantial accounting literature

> Auditors can provide valuable insights by informing audit committees and boards about the key elements that might come under increased scrutiny because of the AQM's implementation.

related to earnings quality and discretionary accruals." One example of how the accounting literature may inform the AQM can be found in the key findings in the Committee of Sponsoring Organizations of the Treadway Commission's (COSO) 2010 report, *Fraudulent Financial Reporting: 1998–2007—An Analysis of U.S. Public Companies*. This study investigated fraudulent financial reporting of U.S. public companies during the 10-year period from 1998 to 2007. The resulting report revealed that the CEO or the CFO was named in 89% of financial reporting fraud cases; improper revenue recognition was the most common fraud technique, noted in 60% of cases; and fraud filers changed auditors 26% of the time, as compared to only 12% of nonfraud filers. The study's revelation of characteristics associated with instances of fraud illustrates the role that accounting research can play in identifying potential fraud indicators, which further informs the AQM.

Lewis also indicated in his 2012 speech that "a poorly conceived model might produce a significant number of false positives. A false positive occurs when the model incorrectly identifies a filer as an outlier. The identification of false positives can be costly, not only for the registrant erroneously tagged as engaging in earnings management, but for staff who has expended resources to investigate further." In order to help ensure the AQM's accuracy in predicting accounting fraud, the SEC tested the model during its development by evaluating how well it predicted SEC accounting and auditing enforcement releases (AAER).

Implications for Public Companies

As more multiple-year public company financial reports are tagged in XBRL format and the SEC's knowledge and experience in the use of the AQM continues to grow, the SEC's ability to quickly identify public companies with relatively high-risk scores for earnings management will also improve. Such scores can be used to identify filers for immediate attention. Customized, company-specific reports can be generated to help the SEC focus specifically on those financial reporting areas that represent outlier discretionary accounting judgments.

Clearly, the AQM tool provides a significant opportunity to improve both the effectiveness and efficiency of the SEC's review of financial reporting. But what are the implications for public company directors, audit committee members, and auditors? What actions should public companies and their auditors consider taking in response to the AQM?

First, individuals responsible for corporate governance should be proactive in attempting to identify potential outlier discretionary accruals for investigation and further scrutiny. Auditors can provide valuable insights to their public clients by informing audit committees and boards about the renewed SEC focus on fraudulent financial reporting, as well as the key elements that might come under increased scrutiny because of the AQM's implementation.

Second, it is important for auditors to understand and potentially test outlier dis-

cretionary accruals for both understatement and overstatement of earnings, because either condition may be detected as an indicator of potential earnings management and flagged by the AQM for further examination. Analytical review can be performed using the elements of the Jones model—for example, by measuring the change in revenue to the change in key noncash (accrual) accounts, such as accounts receivable, inventory, and accounts payable. The ratio of these changes may be compared to a group of peer companies of comparable size operating in the same industry.

Third, the consideration of risk indicators and risk inducers—such as the examples provided by Lewis and outlined in Exhibit 1—should be included as an element of a public company's corporate governance process and discussed during the external auditor's planning session as part of its consideration of fraud risk factors, as required under Statement on Auditing Standards (SAS) 99, *Consideration of Fraud in a Financial Statement Audit*. Academic research might also be consulted to identify potential risk indicators and risk inducers. For example, management typically has compensation incentives (e.g., bonuses, stock options) to meet analysts' earnings targets, which might represent a risk inducer. Consistently meeting these earnings targets by a small margin might indicate the existence of earnings management or a risk indicator.

In "Executive Stock Options, Missed Earnings Targets, and Earnings Management," researchers provided evidence that just missing analysts' earnings targets could also indicate the presence of earnings management when "a missed target could benefit an executive via a lower strike price in subsequent option grants" (Mary Lea McAnally, Anup Srivastava, and Connie D. Weaver, *Accounting Review*, 2008).

Next Steps

Once potential discretionary accrual outliers, risk indicators, and risk factors have been identified, public company directors, audit committee members, and auditors should analyze the underlying reasons for the findings. This review might cause them to reconsider aggressive accounting decisions or, at minimum, it might prompt a discussion regarding the justification of potential unfavorable outliers. Even if only the latter course of action is taken, this advanced knowledge and discussion will assist public companies during any potential SEC financial reporting investigation. Performing these actions might also improve audit and reporting quality and provide a useful framework for auditors and their clients to consider. ❑

Douglas M. Boyle, DBA, CPA, CMA, is a department director and assistant professor, James F. Boyle, CPA, is a faculty specialist, and Brian W. Carpenter, PhD, is a professor, all at the University of Scranton, Scranton, Pa.

EXHIBIT 2
Jones Model and Modified Jones Model to Measure Discretionary (Abnormal) Accruals

Discretionary (abnormal) accruals are measured by the extent to which total accruals deviate from predicted nondiscretionary (normal) accruals.

Jones Model (1991)	Modified Jones Model (1995)
Normal accruals are a function of— ■ annual change in revenues ■ gross property, plant, and equipment	Normal accruals are a function of— ■ annual change in revenue minus change in receivables ■ gross property, plant, and equipment

Timeline

■ 1991: Jennifer J. Jones justified the inclusion of changes in revenues and gross property, plant, and equipment as a function of normal accruals:

Total accruals include changes in working capital accounts, such as accounts receivable, inventory and accounts payable, that depend to some extent on changes in revenue. … Gross property, plant, and equipment is included to control for the portion of total accruals related to nondiscretionary depreciation expense. ("Earnings Management during Import Relief Investigations," *Journal of Accounting Research*, vol. 29, pp. 211–212)

■ 1995: Patricia M. Dechlow, Richard G. Sloan, and Amy P. Sweeney explained their suggested modification to the Jones model:

The modified version of the Jones Model implicitly assumes that all changes in credit sales in the event period result from earnings management. This is based on the reasoning that it is easier to manage earnings by exercising discretion over the recognition of revenue on credit sales than it is to manage earnings by exercising discretion over the recognition of cash sales. ("Detecting Earnings Managements," *Accounting Review*, vol. 70, p. 199)

■ 2012: Craig M. Lewis stated in his speech to Financial Executives International Committee on Finance and Information Technology:

Traditional models [on earnings management detection]—often based on the popular "Jones" model or the "modified Jones" model—generally attempt to isolate the effect of discretionary accruals by regressing total accruals … on factors that proxy for non-discretionary accruals and treating the unexplained portion (the residual) as an estimate of discretionary accruals. ("Risk Modeling at the SEC: The Accounting Quality Model," http://www.sec.gov/News/Speech/Detail/Speech/1365171491988)