## **How To Assess Accounting Materiality Amid Economic Crisis**

By Bin Zhou, Adrienna Huffman and Chi Cheng (May 8, 2020)

The assessment of materiality is an important accounting and legal concept, and often a key inquiry in financial accounting investigations and litigation. However, assessments of materiality are not bright-line tests and can be subjective.

The economic turbulence created by the COVID-19 pandemic will require companies to make significant judgments and estimates in their accounting and financial reporting decisions.

An April 3 speech from the U.S. Securities and Exchange Commission's chief accountant highlighted accounting areas that "certain judgments and estimates can be challenging in an environment of uncertainty."[1] As a result, these areas, such as fair value and impairment considerations, revenue recognition, and going concern, may be ripe for future error corrections.

The line between financial statement restatements, or material accounting errors, versus revisions, or immaterial errors, can be blurry, as illustrated in a December 2019 Wall Street Journal article, titled "Shh! Companies are fixing accounting errors quietly." Based on a large dataset of over 11,000 revision versus restatement decisions by companies filing financial statements with the SEC between 2005 and 2018, the article reported the decade-long trend that more companies have been revising, and fewer companies have been restating, their financial statements.[2]

When accounting guidance on materiality was first proposed in the late 1970s and early 1980s,[3] several quantitative methods were put forward but ultimately deemed premature for methodological and data availability reasons.[4] Given this large dataset on firms' revision versus restatement decisions, these quantitative methods can now be revisited and used to help assess materiality in the context of legal disputes.



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This article provides a refresh and further development of three data-driven quantitative methods. Accounting professionals and litigators can use the approaches in this article to evaluate accounting materiality claims, particularly in cases where traditional quantitative factors fail to adequately establish whether or not the accounting error was material (i.e., the error is on the margin of being material); and data exists on comparable revision versus restatement decisions.

## **Assess Accounting Materiality From Management Decisions**

Our first two proposed methods focus on benchmarking a company's accounting error(s) and surrounding circumstances against a set of comparable companies' revision versus restatement decisions and circumstances. Surrounding circumstances may be identified from standard financial statement databases and publicly available SEC forms (e.g., Form 10-K and 8-K).

To implement this approach, we propose using two cross-sectional methods: a pure

comparables approach based on a carefully constructed subset of the comparable companies' decisions and a regression-based method applied to a larger dataset of decisions (e.g., decisions by companies in a broadly defined industry group). Each method provides insight into what other companies with similar qualitative and quantitative characteristics decided to do — revise or restate.

The first method provides an empirical supplement to the rule-of-thumb approach to materiality. Examples of rule-of-thumb thresholds for accounting materiality — referenced in the Financial Accounting Standards Board's 1980 statement of financial accounting concepts No. 2, or CON 2., and the SEC's 1999 staff accounting bulletin No. 99, or SAB 99 — include 2% of assets, 5% of earnings, 10% of revenues, etc.[5]

However, no standard-setter or regulator issues bright-line tests of materiality rules,[6] so practitioners (both auditors and management) continue to exercise broad discretion to apply different criteria and thresholds for accounting materiality.

With access to a dataset of restatement versus revisions, an accounting professional or an accounting expert may identify comparable companies based on some set of characteristics (e.g., companies in similar industries with similar profitability over a similar period), to understand how these comparable companies treated and measured potential accounting errors.

They can also identify the key financial metrics most closely associated with the decisions and extrapolate the thresholds that may have been used by the companies.

The above analysis may be taken one step further using a second method: Building a predictive, or regression, model of restatement versus revision decisions, without limiting the dataset to a subset of pure comparable companies. This model would demonstrate whether companies facing similar surrounding circumstances are more likely to restate or revise their financial statements.

Unlike the first method, the regression-based prediction model uses all available data on a larger set of firms' restatement versus revisions decisions. As a result, it can account for multiple factors that may have influenced a company's decision to restate versus revise, determining whether and how important those factors might be.

These factors may include the nature and size of the judgment item in question (for example, a contingent liability), the size of the enterprise, its financial condition and recent changes in condition, and present and recent profitability.

The factor coefficients from the regression-based prediction model may then be used alongside the company's own data to predict whether, given similar circumstances, other companies were more likely to revise or restate. Indeed, this method is not new and was suggested in FASB's CON 2 in 1980:

[S]imulate some aspects of the decision making processes of auditors by constructing a model that will bring into play many of the decision variables that enter into materiality judgments.[7]

A lack of readily available data and less sophisticated modeling techniques made the approach immature at the time. However, as illustrated by the WSJ article, in today's business environment and with access to data analytics, it is possible to implement this method to assess the materiality of accounting errors.

## **Assess Accounting Materiality From Expected Market Reaction**

Rather than testing the company's materiality determination, as in the two approaches described above, a third data-driven quantitative method is to examine the stock price's expected reaction to the correction of accounting errors, without labeling the overall impact as material or immaterial.

In other words, this third proposed method examines the investors' expected assessment: If the market is expected to react significantly to the announcement, the accounting errors are material. Like the second approach above, this approach would first estimate the empirical relationship between stock price reactions and accounting errors, as well as many other variables across a large dataset. Then, the empirical relationship is applied to the company at issue to predict the magnitude of the stock price reaction.

The idea of examining stock price reactions in the context of materiality decisions is also not new. The SEC's SAB 99 states when:

management or the independent auditor expects (based, for example, on a pattern of market performance) that a known misstatement may result in a significant positive or negative market reaction, that expected reaction should be taken into account when considering whether a misstatement is material.

## Conclusion

Using data-driven quantitative methods is an appealing approach to incorporate additional criteria in assessing accounting materiality. Nonetheless, the results of an empirical cross-sectional analysis are by no means a substitute for case-specific factual inquiries and evaluations of all relevant quantitative and qualitative criteria.

While statistical regression-based models provide an objective, data-driven evaluation of explanatory factors, this approach by itself risks failure to incorporate all relevant factors. By itself, a significant deviation from the norm relative to historical revision versus restatement decisions or a predicted large stock price reaction when a revision is predicted should not be taken to indicate that there is fraud or intent to mislead investors.

Two caveats are in order before implementing our suggested approaches. First, the statistical power of quantitative models depends on the comparability of the sample and the quality of the data. A regression-based model can be made more reliable when more informative data points, not merely a large quantity, are available.

Second, relative to personal judgment, data analytics models are more objective and their assumptions and results can be tested statistically by an expert. Despite this, accounting professionals and experts must remember that the variables selected for a regression-based model can add subjectivity to the analysis. Take care to avoid overstating the power of such models, especially when empirical data are not perfect.

Using quantitative methods on readily available empirical data can help accounting professionals and accounting experts enhance existing tests to assess accounting materiality. We expect to see an increase in experts who supplement their materiality assessments with data-driven quantitative methods.

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- [1] Sagar Teotia, Securities and Exchange Commission, "Statement on the Importance of High-Quality Financial Reporting in Light of the Significant Impacts of COVID-19," April 3, 2020, https://www.sec.gov/news/public-statement/statement-teotia-financial-reporting-covid-19-2020-04-03.
- [2] Jean Eaglesham, "Shh! Companies are fixing accounting errors quietly," The Wall Street Journal, December 5, 2019. Restatements are different from revisions on dimensions of both materiality and disclosure. Specifically, material errors are required to be restated and disclosed using a separate 8-K filing. Revisions, on the other hand, are deemed immaterial and as such do not require an 8-K filing.
- [3] For example, Financial Accounting Standards Board (FASB) Statement of Financial Accounting Concepts (CON) No. 2 (1980), ¶ 167 observes that "one approach in seeking guidance about what constitutes a material item or a material error is to examine current practice empirically."
- [4] See, in particular, FASB CON 2.
- [5] See FASB CON 2, Table 1; SAB 99.
- [6] For example, SAB 99 states, "The FASB has long emphasized that materiality cannot be reduced to a numerical formula. In its Concepts Statement No. 2, the FASB noted that some had urged it to promulgate quantitative materiality guides for use in a variety of situations. The FASB rejected such an approach."
- [7] FASB CON 2, ¶ 170.