

February 22, 2017

Prof. Arnold Schilder
Chair
International Auditing and Assurance Standards Board
529 Fifth Avenue, 6th Floor
New York, NY 10017

Re: Comment Letter on Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics

Dear Prof. Schilder,

CFA Institute,¹ in consultation with its Corporate Disclosure Policy Council (“CDPC”)², appreciates the opportunity to comment on the International Auditing and Assurance Standards Board’s (“IAASB” or “Board”) Request for Input, *Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics*.

CFA Institute is comprised of more than 130,000 investment professional members, including portfolio managers, investment analysts, and advisors, worldwide. CFA Institute seeks to promote fair and transparent global capital markets and to advocate for investor protections. An integral part of our efforts toward meeting those goals is ensuring that the quality of corporate financial reporting and disclosures provided to investors and other end users is of high quality.

¹ With offices in Charlottesville, New York, Hong Kong, London, Mumbai and Beijing CFA Institute is a global, not-for-profit professional association of more than 133,000 investment analysts, portfolio managers, investment advisors, and other investment professionals in 151 countries, of whom more than 125,000 hold the Chartered Financial Analyst® (CFA®) designation. The CFA Institute membership also includes 145 member societies in 70 countries and territories.

² The objective of the CDPC is to foster the integrity of financial markets through its efforts to address issues affecting the quality of financial reporting and disclosure worldwide. The CDPC is comprised of investment professionals with extensive expertise and experience in the global capital markets, some of whom are also CFA Institute member volunteers. In this capacity, the CDPC provides the practitioners’ perspective in the promotion of high-quality financial reporting and disclosures that meet the needs of investors.

Executive Summary

CFA Institute supports the direction and approach of the IAASB towards incorporating data analytics in the International Standards on Auditing (ISAs). It is our position that the use of data, data analytics and technology can result in a more effective and efficient overall financial reporting process, including the audit, in which investors -- including CFA Institute members (primarily analysts and investors) -- would receive more transparent, better-quality information on a timely basis.

It is important for the ISAs to reference data analytics to ensure that auditors are not deterred from using data analytics in their audits or allowing audit procedures to develop and change to ensure audits are conducted in a more effective and efficient manner and are of high quality.

However, as we note in our CFA Institute publication, [*Data and Technology: Transforming The Financial Information Landscape*](#) “greater research is required by both accounting firms and academics on how and which audit procedures and audit standards may be changed -- not just to improve the audit process but also to allow it to truly evolve.”

Until further research is conducted there is a need to strike a balance between leaving the ISAs as is and making whole sale changes to the ISAs. Involvement of the IAASB’s Data Analytics Working Group (DAWG) in further research – alongside that being undertaken by academics and accounting firms -- and outreach as well as in future standard-setting activities may reveal how best to reference data analytics within the ISAs without making wholesale changes that might lead to unintended consequences.

We agree with the DAWG’s identification of those projects under review by the IAASB where data analytics will likely have a role – Professional skepticism, ISA 315 (Revised), *Identifying and Assessing the Risks of Material Misstatement Through Understanding the Entity and Its Environment*, Quality Control, Group Audits, and ISA 540, *Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures*.

In addition, we believe the DAWG should work with the International Accounting Education Standards Board as accountants and auditors will need to develop different skills through increased education in technology and analytic methods.

Furthermore, as we note in our publication there is also a need for “A reexamination of concepts --such as materiality, independence, and what constitutes sufficient audit evidence.” We also believe that the standards should accommodate for changes such as continuous auditing. Indeed, while contemplating changes to the ISAs, it is necessary to contemplate what the future may look like to ensure that principles-based standards may appropriately accommodate future changes.



We encourage the IAASB in continuing to conduct outreach with all stakeholders through direct outreach, roundtables and other means. In its outreach we hope the DAWG has or will consult with the Public Company Accounting Oversight Board as well as enforcement agencies such as the US Securities and Exchange Commission. CFA Institute would be happy to be involved in such outreach efforts.

Overview

We support the efforts of the DAWG to perform outreach, gain insights and inform stakeholders about the opportunities and challenges with the use of data analytics and technology in an audit.

The proposal is timely and we agree with key themes covered -- data acquisition and managing large datasets, conceptual challenges when performing an audit using data analytics, legal and regulatory challenges regarding data security and privacy, as well as jurisdiction law, staff resources and expertise. This includes the effect on risk assessments, testing approaches, analytical procedures and other audit evidence.

As outlined in the CFA Institute report we believe that integrating data analytics and technology into the audit would lead to a higher quality audit. The report states,

...auditors can use audit data analytics to leverage value. Greater use of audit data analytics would help auditors to combine information from disparate data sources for their analyses, visualize financial performance and other data, and identify patterns and anomalies. In addition, it could be used to

- *identify risk associated with accepting or continuing an audit,*
- *identify risks of material misstatements,*
- *detect fraud,*
- *identify higher-risk transactions,*
- *perform analytical procedures in response to the auditor's assessment of these risks, and*
- *assess management's representations by analysis of financial transactions.*

*Indeed, we believe data analytics should be integrated into the entire audit life cycle—risk assessment, scoping, fieldwork planning, execution, monitoring, and reporting. It would lead to improved coverage of transactions and enhanced risk focus and insight and support **professional skepticism**.*

It is our position that the use of data, data analytics and technology can result in a more effective and efficient overall financial reporting process, including the audit, in which investors -- including CFA Institute members (primarily analysts and investors) -- would receive more transparent, better-quality information on a timely basis.

Incorporation of Data Analytics in ISAs

The ISAs do currently acknowledge the use of technology by the auditor in executing the audit, through use of Computer Assisted Audit Techniques (CAATs). However, we

believe that the reference to CAATs is insufficient given the developments that have taken place in data and technology. As the proposal states, “the reference to CAATs in the ISAs was created in a completely different technological era and CAATs have evolved significantly into what is now being referred to as data analytics.”

The proposal goes on to state that while the ISAs do not prohibit the use of data analytics techniques, the lack of reference to data analytics in the ISAs may be viewed as a barrier to their adoption. This is a concern to the investor community. Auditors should not be deterred from using data analytics and hence the ISAs need to reference data analytics.

Furthermore, per the proposal,

This lack of reference to data analytics in the ISAs also results in some being of the view that gathering information from the use of data analytics does not necessarily reduce the procedures required by the ISAs today, even if those required procedures now appear redundant as a result of the information gained from the use of data analytics.

The use of data analytics should allow procedures to evolve leading to a more efficient, high-quality audit that affords investors greater transparency. We agree with the proposal that, “while the auditing standards are not broken, they need to reflect current practices and developments in order to remain relevant and meet investor expectations of the effective use of technology by the auditor to deliver high-quality audits.”

Further, we concur that there are challenges for audit oversight authorities and a risk that views of audit oversight authorities in different jurisdictions might evolve in an inconsistent manner – without a reference to data analytics within the ISAs.

However, as we note in our CFA Institute publication “greater research is required by both accounting firms and academics on how audit procedures may be changed -- not just to improve the audit process but also to allow it to truly evolve.”

The proposal states,

While audit regulators and oversight bodies are engaging in proactive discussions with auditors on the topic of data analytics, they are just beginning to see its use in the audit through inspection activity. Academic studies of the role that data analytics can play in enhancing audit quality are also underway. Without more information, including solutions to the challenges noted throughout this document, wholesale change to the ISAs in the near term may have unintended consequences (such as inhibiting innovation), due to the fast-paced nature of the developments with data analytics in the audit of financial statements.

We agree. Until further research is conducted there is a need to strike a balance between leaving the ISAs as is and making whole sale changes to the ISAs. Involvement of the DAWG in further outreach and research and in future standard-setting activities may reveal how best to reference data analytics within the ISAs without making wholesale changes that might lead to unintended consequences.

While such research is ongoing on the part of both accounting firms and academics, we believe it is equally important that standard setters undertake such research as well. In the case of the IAASB this may be best undertaken by the DAWG.

Standard Setting

The DAWG should be involved in ongoing projects to identify opportunities to include language related to data analytics within those standards. We agree with the DAWG’s identification of those projects under review by the IAASB where data analytics will likely have a role – Professional skepticism, ISA 315 (Revised), *Identifying and Assessing the Risks of Material Misstatement Through Understanding the Entity and Its Environment*, Quality Control, Group Audits, and ISA 540, *Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures*.

While participating in the review of these projects we believe it is important that the DAWG keep in mind that although data analytics will enable auditors to improve their risk assessment processes, the use of data analytics won’t substitute the need for professional judgment and professional skepticism. Furthermore, the controls around the analytical tools and software used will become even more vital.

Further, we believe the DAWG should work with the International Accounting Education Standards Board as accountants and auditors will need to develop different skills through increased education in technology and analytic methods.

The DAWG expects that there will be other areas of the ISAs impacted, including:

- ISA 240, *The Auditor’s Responsibilities Relating to Fraud in an Audit of Financial Statements*
- ISA 320, *Materiality in Planning and Performing An Audit*
- ISA 330, *The Auditor’s Procedures in Response to Assessed Risks*
- ISA 500, *Audit Evidence*
- ISA 520, *Analytical Procedures*
- ISA 530, *Audit Sampling*

We concur with the areas identified. Further, as we note in our publication there is also a need for “A reexamination of concepts—such as materiality, independence, and what constitutes

sufficient audit evidence.” We also believe that the standards should accommodate for changes such as continuous auditing,

Existing standards do not address information presented in electronic format transmitted over the internet or what firms are doing with continuous auditing/continuous monitoring. Auditing standards/guidance would be needed on applying data analytics, continuous auditing, and other auditing technology.

Research needs to be conducted on what impact such changes may have such as on the timing and the frequency of the audit.

What Will the Future Look Like?

Indeed, while contemplating changes to the ISAs it is necessary to contemplate what the future may look like to ensure that principles-based standards may appropriately accommodate future changes.

As we state in our publication,

External reporting currently represents a subset of information management uses internally. Companies may start sharing information intended for internal management with

external stakeholders. But questions remain:

- *Will assurance be provided on the internal information?*
- *Does the legal culture present constraints to progress in the auditing process?*
- *What will the audit report look like? Will the audit opinion be developed on a true and fair basis? The current audit report addresses financial statements taken as a whole rather than as individual components. Will that change?*

Instead of focusing on historical financial data, companies and auditors may expand into nonfinancial information, such as operational and strategic data, and into information that is increasingly real time and even predictive.

Next Steps

CFA Institute supports the next steps identified by the DAWG including:

- Focusing attention on revisions, where appropriate, to ISAs affected by the IAASB’s current projects.
- Hosting conferences with interested stakeholders to explore issues and possible solutions to the identified challenges.
- Continuing with outreach and exploration of issues associated with the use of data analytics in a financial statement audit, with a view towards a formal Discussion Paper consultation in advance of any formal standard-setting activities.

The DAWG should continue its dialogue with accounting firms, regulators and audit oversight authorities, preparers, investors, those charged with governance, national auditing standard setters and other relevant stakeholders to further understand relevant issues and to leverage the work done by others. In its outreach we hope the DAWG has consulted with the Public Company Accounting Oversight Board as well as enforcement agencies such as the US Securities and Exchange Commission.

The IAASB should also continue to encourage cooperation and debate among regulators, policymakers, national auditing standard setters and other stakeholders in an effort to avoid jurisdictional differences.

Thank you again for the opportunity to comment on the Request for Input. If you or your staff have questions or seek further elaboration of our views, please contact either Mohini Singh, ACA, by phone at +1.434.951.4882, or by e-mail at mohini.singh@cfainstitute.org or Vincent Papa, CFA by phone at +322.207.1211 or by email at vincent.papa@cfainstitute.org.

Sincerely,

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