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Comptroller General
of the United States

United States Government Accountability Office
Washington, DC 20548

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International Federation of Accountants
545 Fifth Avenue, 14th Floor
New York, New York 10017

Subject: International Auditing and Assurance Standards Board (IAASB) July 2007
Exposure Draft: *ISA 530, Audit Sampling*

This letter provides the U.S. Government Accountability Office's (GAO) comments on the IAASB's proposed revisions to ISA 530.

GAO is committed to transforming and modernizing the accountability profession; accordingly, we support the IAASB's efforts to improve the clarity of its auditing standards. Overall, we support the proposed revisions to ISA 530. In particular, we believe that the proposed revisions to ISA 530 help clarify the auditor's responsibility to project and evaluate sample results.

In our review of the proposed standard, we identified certain issues for which we have proposed suggestions. Specifically, we believe certain provisions of the draft standard are inconsistent with statistical principles and, therefore, require revision to help avoid having auditors reach inappropriate audit conclusions.

Because statistical principles are too complex to explain in detail in an auditing standard, we encourage the IAASB to develop a sampling audit guide that would provide additional guidance on this complex topic. In addition to assisting users, such an audit guide would encourage greater consistency of practice. Alternatively, the standard could refer users to guides and textbooks developed by others, such as the American Institute of Certified Public Accountants (AICPA) guide on audit sampling.

Our comments below offer suggestions for improving the following issues discussed in the proposed standard:

- Anomalies
- Sample design, size and selection of items for testing
- Clarifying the role of random selection
- Enhancing guidance on value weighted selection
- Factors influencing sample size
- Sample selection methods

Anomalies

We propose revisions to paragraphs 5(m), 13, and A18 of the proposed standard to narrow the definition and discussion of anomalies because of our concerns that the requirements and guidance related to anomalous misstatements in these paragraphs could be misleading. Anomalies are not recognized under statistical principles, and accordingly, should only be recognized in the audit sampling standard if they are very narrowly defined and require the application of appropriate audit procedures.

Also, we recommend replacing the word “certainty” with “assurance” in paragraph 13 and throughout the standard, since certainty could imply absolute assurance, which is not the objective of a financial audit. In paragraph 13, we recommend revising the first sentence to indicate that the auditor cannot conclude that a misstatement or deviation is an anomaly until highly persuasive audit evidence to support the conclusion is obtained. We recommend modifying paragraph A18 to more clearly articulate guidance for evaluating anomalous misstatements.

To help avoid misinterpretation of the standard and to improve consistency with underlying statistical principles, we recommend revising and expanding paragraphs 5(m), 13, and A18, as follows:

Paragraph 5(m): Anomaly – A unique misstatement or deviation for which highly persuasive evidence is available to support a conclusion that ~~is demonstrably not representative of the~~ misstatements or deviations should not be projected to the population.

Paragraph 13: In the extremely rare circumstance when the auditor believes that ~~considers~~ a misstatement or deviation discovered in a sample ~~to may~~ be an anomaly, the auditor shall obtain highly persuasive evidence a high degree of certainty that such misstatement or deviation is unlikely to be not representative of the population. This evidence shall include evaluating management’s reasoning as to why the misstatement or deviation is an anomaly and why the misstatement or deviation was not detected and corrected by the entity’s internal controls. ~~The auditor shall obtain this degree of certainty by performing additional audit procedures to obtain sufficient appropriate audit evidence that the misstatement or deviation does not affect the remainder of the population.~~ (Ref: Para. A16)

Paragraph A18: When a misstatement has been established as an anomaly, it may be excluded when projecting misstatements in samples to the population. However, the effect on the population of any ~~such anomalous~~ misstatement, ~~if uncorrected~~, still needs to be separately estimated and then combined with ~~considered in addition to~~ the projection of the non-anomalous misstatements when evaluating the sample results.

Sample Design, Size and Selection of Items for Testing

We are concerned that Paragraphs 7 and A19-A21 may misinterpret statistical principles related to sample size and evaluation. Statistical principles indicate that the estimated maximum misstatement (or estimated maximum rate of deviation) is compared with the tolerable misstatement (or tolerable rate of deviation) in evaluating the results of testing a sample of items in a population. Comparing the total estimated misstatement (or total rate of deviation) with the tolerable misstatement (or tolerable rate of deviation) will not provide an allowance for sampling risk.

In order to correct this, we recommend revising the guidance in paragraphs 7 and A19-A21, as follows:

Paragraph 7: The auditor shall determine a sample size sufficient to allow the auditor to conclude with an appropriate level of sampling risk that:

- (i) In the case of substantive tests of details, the estimated maximum total misstatement does not exceed tolerable misstatement; or
- (ii) In the case of tests of controls, the estimated maximum total rate of deviation does not exceed the tolerable rate of deviation. (Ref: Para. A9-A10)

Paragraph A19: A separate evaluation of each test of control is performed by determining known deviations, the estimated deviation rate, and the estimated maximum deviation rate. If the estimated maximum deviation rate exceeds the tolerable rate, it is generally appropriate for the auditor to conclude that the sample results do not support the planned assessed level of control risk. However, the auditor may desire additional audit evidence to reduce audit risk.

To determine the effect of projected misstatements in an individual substantive test, the aggregate effect of all misstatements identified in the audit is established. This involves calculating total known misstatement and total likely misstatement (the auditor's best estimate of the total misstatement likely to exist in the population). Based on such aggregation, the auditor may determine that additional audit evidence is needed to reduce audit risk to an acceptable level. For example, when the aggregate misstatement, which includes the projected non-anomalous misstatement and the anomalous misstatement, exceeds that which the auditor deems tolerable, the auditor may desire additional audit evidence related to one or more samples to reduce audit risk. Also, if the aggregate likely misstatement (which includes anomalous misstatement) is less than but close to materiality, the auditor may desire additional audit evidence.

When the projected rate of deviation exceeds the tolerable rate of deviation or the projected misstatement plus anomalous misstatement exceeds that which the auditor deems tolerable, the sample does not provide an appropriate basis for conclusions about the population that has been tested. If the total amount of projected misstatement plus anomalous misstatement is less than but close to that which the auditor deems tolerable, the auditor may consider the persuasiveness of the sample results in the light of other audit procedures, and may consider it appropriate to obtain additional audit evidence. The total of projected misstatement

~~plus anomalous misstatement is the auditor's best estimate of misstatement in the population. However, sampling results are affected by sampling risk. Thus when the best estimate of misstatement is close to the tolerable misstatement, the auditor recognizes the risk that a different sample would result in a different best estimate that could exceed the tolerable misstatement. Considering the results of other audit procedures helps the auditor to assess this risk, while the risk is reduced if additional audit evidence is obtained.~~

Paragraph A20: ~~When using statistical sampling~~In accordance with statistical principles, the auditor may use the estimated maximum misstatement is used for purposes of concluding whether the audit sample has provided an appropriate basis for conclusions. See Appendix 5.

Paragraph A21: If the auditor determines that additional audit evidence related to an audit sample is desired, the auditor may: ~~If the auditor concludes that audit sampling has not provided an appropriate basis for conclusions about the population that has been tested, the auditor may:~~

- Request management to ~~first (1)~~ first (1) investigate misstatements or deviations that have been identified, ~~and (2) investigate~~ and (2) investigate the potential for further misstatements or deviations in the population, and ~~to (3)~~ to (3) make any necessary adjustments; and/or
- Tailor the nature, timing and extent of those further audit procedures to best achieve the required assurance. For example, in the case of tests of controls, the auditor might ~~extend the sample size~~, test an alternative control or modify related substantive procedures. When using a statistical sampling approach, it is rarely appropriate to expand the sample size unless the test was designed to be extended. For nonstatistical sampling, expanding the sample size is often inefficient since testing of an extended sample is likely to provide similar results as tests performed on the initial sample.

If it is not possible for management to perform such procedures or for the auditor to obtain additional audit evidence, the auditor may not have sufficient evidence to issue an unmodified opinion.

Clarifying the Role of Random Selection

The proposed standard indicates that random selection is a basic characteristic of statistical sampling. However, not all statistical samples involve random selection. For example, when a random starting point is used, a systematic method of sample selection may be used for statistical sampling. Stratified sample selection and monetary unit sampling selection methods also are often used for statistical sampling. To improve consistency with statistical principles, we suggest changes to paragraphs 5(f) and A11 of the proposed standard.

In addition, we recommend revising the wording of paragraph A11 to recognize that both statistical and nonstatistical sampling require use of professional judgment.

To incorporate these suggestions into the proposed standard, we recommend revising paragraphs 5(f) and A11 as follows:

Paragraph 5(f): Statistical sampling – An approach to sampling that requires that (1) every unit in the population has a known probability of selection that is greater than zero, (2) uses probability theory to select a sample of items from a population, (3) uses a method of estimation that appropriately considers the selection probabilities in making projections to the population, and (4) provides a measure of sampling risk that is appropriate for evaluating results of testing performed on the sample items in order to reach a conclusion about the population. A sampling approach that does not have characteristics (1) through (4)(i) and (ii) is considered non-statistical sampling. ~~has the following characteristics:~~

- ~~(i) Random selection of the sample items; and~~
- ~~(ii) The use of probability theory to evaluate sample results, including measurement of sampling risk.~~

Paragraph A11: ~~Statistical sampling requires that sample items are selected at random so that each sampling unit has a known probability of being selected. The sampling~~ Sampling units might be physical items (for example, checks listed on deposit slips, credit entries on bank statements, sales invoices or debtors' balances) or monetary units. ~~With non-statistical sampling, an auditor uses professional judgment to select the items for a sample.~~ Because the purpose of sampling is to draw conclusions about the entire population, it is important that the auditor selects a representative sample by choosing sample items ; that which have characteristics typical of the population, ~~and~~ so that bias is avoided.

In statistical sampling, professional judgment is important for determining the appropriate risk level, the expected misstatement and the tolerable misstatement, and also for evaluating the results of testing. While non-statistical sampling can be appropriate in certain situations, it requires considerable professional judgment in determining sample size, selecting the sample items, and evaluating the results. Further, it does not use the laws of probability to measure sampling risk.

Enhancing Guidance on Value Weighted Selection

We suggest enhancing the guidance in Appendix 1 on value weighted selection to indicate that this method of sample selection is designed to provide an efficient approach to testing for overstatements when few misstatements are expected. We also suggest deleting the reference to random sample selection, since systematic sample selection is not a random selection method. In addition, we suggest referring readers to the guidance on monetary-unit sampling in Appendix 4.

Accordingly, we suggest revising Appendix 1, paragraph 3, as followed:

Appendix 1, Paragraph 3: When performing tests of details it will often be efficient, particularly when testing for overstatements and few misstatements are expected, to identify the sampling unit as the individual monetary units (for example, dollars) that make up the population. This method of sampling, known as monetary-unit sampling (MUS), is defined in Appendix 4. Having selected specific monetary units

from within the population, for example, the accounts receivable balance, the auditor ~~would~~may then examine the particular items, for example, individual balances, that contain those monetary units. One benefit of this approach to defining the sampling unit is that audit effort is directed to the larger value items because they have a greater chance of selection. ~~When few misstatements are expected, this, and can result in smaller sample sizes than sampling methods that use equal probability selection of the items.~~ This approach ~~may be~~is ordinarily used in conjunction with the systematic method of sample selection (described in Appendix 4). ~~and is most efficient when selecting items using random selection.~~

Sample Selection Methods

We recommend including monetary unit sampling (MUS) sampling in the Appendix 4 discussion of principal sample selection methods. MUS has been used in auditing since before the 1970's and is simpler to use than classical statistical techniques and in some circumstances may be more efficient. We also recommend omitting the last sentence in paragraph (b) of Appendix 4, which states that MUS is a form of systematic sample selection method since use of MUS is not limited to that method.

We propose revising Appendix 4 as follows:

Appendix 4: Sample Selection Methods

There are many methods of selecting samples. The principal methods are as follows:

(a) Random selection, (such as may be applied through random number generators). ~~Statistical texts often refer to this as simple random sampling and derive methodology for sampling either with or without replacement of samples already selected in the sampling process.~~

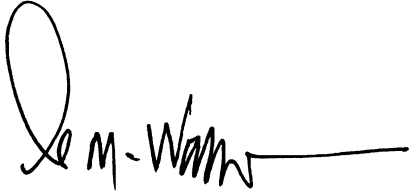
(b) Systematic selection, in which the number of sampling units in the population is divided by the sample size to give a sampling interval, for example 50, and having determined a starting point within the first 50, each 50th sampling unit thereafter is selected. Although the starting point may be determined haphazardly, ~~the sample is more likely to be truly random if it a better practice is to~~ determined the starting point by use of a computerized random number generator or random number tables. When using systematic selection, the auditor would need to determine that sampling units within the population are not structured in such a way that the sampling interval corresponds with a particular pattern in the population. ~~Monetary unit sampling is a form of systematic selection using the monetary unit as the base.~~

(c) Haphazard selection, in which the auditor selects the sample without following a structured technique. Although no structured technique is used, the auditor would nonetheless avoid any conscious bias or predictability (for example, avoiding difficult to locate items, or always choosing or avoiding the first or last entries on a page) and thus attempt to ensure that all items in the population have a chance of selection. Haphazard selection is not appropriate when using statistical sampling.

(d) Monetary unit sampling (MUS), which is a sample size, selection, and evaluation method that uses attributes theory to express a conclusion in dollar amounts. This technique is efficient in low misstatement populations where the primary objective is to test for overstatement.

We thank you for considering our comments on these important issues.

Sincerely yours,

A handwritten signature in black ink, appearing to read "D. M. Walker", with a long horizontal line extending to the right.

David M. Walker
Comptroller General
of the United States

cc: Mr. James M. Sylph, Technical Director
International Auditing and Assurance Standards Board

The Honorable Christopher Cox, Chairman
Securities and Exchange Commission

The Honorable Mark W. Olson, Chairman
Public Company Accounting Oversight Board

Mr. Harold Monk, Chair
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