STANDARDS AND EMERGING ISSUES ADVISORY GROUP MEETING

DISCUSSION – SUBSTANTIVE ANALYTICAL PROCEDURES

MARCH 30, 2023

INTRODUCTION

The PCAOB's standard-setting agenda includes a project to consider changes to an auditor's use of substantive analytical procedures (SAPs) to better align with the auditor's risk assessment and to address the increasing use of technology tools in performing these procedures, including whether to revise AS 2305, *Substantive Analytical Procedures*.

At the March 2023 meeting, members of the Standards and Emerging Issues Advisory Group (SEIAG) will discuss their views and experiences regarding topics relating to the auditor's use of SAPs. This briefing paper is intended to facilitate a focused SEIAG discussion regarding SAPs by providing background information and describing: (i) the use of SAPs in an audit to obtain audit evidence; (ii) SAPs as part of the audit response to assessed significant risks of material misstatement, including fraud risks; (iii) sources of information used in developing the auditor's expectation, and the precision of the auditor's expectation; and (iv) changes as the result of advancements in technology.

In addition, the Board is interested in whether SEIAG members are aware of academic research papers, external reports, or other information sources for evaluating potential economic impacts of modifying PCAOB standards relating to SAPs or providing additional perspectives on this topic that should be taken into consideration.

BACKGROUND

PCAOB standards require the auditor to design and perform substantive audit procedures that address the assessed risks of material misstatement for each relevant assertion of each significant account and disclosure.[1] Substantive audit procedures include tests of details (applying audit procedures

[1] *See* paragraphs .08 and .36 of AS 2301, *The Auditor's Responses to the Risks of Material Misstatement*.

This document was developed by the staff of the Office of the Chief Auditor to foster discussion among the members of the Standards and Emerging Issues Advisory Group at the March 30, 2023 meeting. It is not a statement of the Board; nor does it necessarily reflect the views of the Board, any individual Board member, or PCAOB staff.

to individual items included within an account or disclosure) and SAPs.[2]

SAPs involve the auditor developing an expectation of what recorded amounts are likely to be based on plausible and predictable relationships between financial and nonfinancial data. SAPs also involve the auditor comparing the expectation to recorded amounts (or ratios derived from recorded amounts), investigating differences, and performing additional procedures, if necessary. For example, an auditor could evaluate a company's interest expense by developing an expectation for interest expense based on the principal amounts and applicable interest rates of the company's debt instruments. Having developed the expectation, the auditor would then compare the expectation to recorded interest expense, appropriately investigating differences between the expectation and recorded amount, and performing additional procedures, if necessary, to obtain sufficient appropriate audit evidence. SAPs range from simple comparisons to complex analyses involving many relationships and elements of data.

SAPs are performed by the auditor as part of addressing an assessed risk of material misstatement. SAPs differ from other types of analytical procedures that are required under PCAOB standards to achieve various objectives throughout the audit. For example, analytical procedures other than SAPs are performed as part of identifying and assessing risks of material misstatement (i.e., as risk assessment procedures[3]) and as part of the auditor's overall review.[4] These types of analytical procedures are generally performed at a lower level of precision than SAPs, because they often involve analyzing data aggregated at a higher level than for SAPs.[5]

AS 2305, *Substantive Analytical Procedures*, is an interim standard that establishes requirements regarding the use of SAPs in an audit.[6] Since the standard was written:

- The Board issued certain fundamental auditing standards in 2010, addressing areas of auditor responsibilities related to identifying, assessing, and responding to risks of material misstatement to the financial statements;[7] and

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[2] *See* paragraph .13 of AS 1105, *Audit Evidence*.
[3] *See* paragraphs .46-.48 of AS 2110, *Identifying and Assessing Risks of Material Misstatement* for the auditor's requirements related to designing and performing analytical procedures as part of identifying and assessing risks of material misstatement.
[4] *See* paragraphs .05-.09 of AS 2810 *Evaluating the Results of the Audit of Financial Statements* for the auditor's requirements related to performing analytical procedures in the overall review.
[5] *See* AS 2110.48.
[6] On April 18, 2003, the Board adopted Interim Auditing Standards which included AU Section 329, *Analytical Procedures.* AU Section 329 *(formerly* SAS No. 56; SAS No. 96) was effective for audits of financial statements for periods beginning on or after January 1, 1989. Since the adoption of the interim standard, some conforming amendments were made to AS 2305 in connection with other standard-setting projects, including the auditing standards related to the auditor's assessment of and response to risk.
[7] *See Auditing Standards Related to The Auditor's Assessment of and Response to Risk and Related Amendments to PCAOB Standards*, PCAOB Release No. 2010-004 (Aug. 5, 2010). The standards adopted included AS No. 12, *Identifying and Assessing Risks of Material Misstatement,* AS No. 13, *The Auditor's Responses to the Risks of Material Misstatement,* and AS No. 15, *Audit Evidence.* In 2015, the PCAOB reorganized its auditing standards using a topical structure and a single, integrated number system, and these standards were designated as AS 2110, AS 2301, and AS 1105, respectively. *See Reorganization of PCAOB Auditing Standards and Related Amendments to PCAOB Standards and Rules*, PCAOB Release No. 2015-002 (Mar. 31, 2015). The

- There have been advancements in both the use of technology-based tools by auditors to access and analyze data and the availability of information, which may affect how and to what extent auditor's use SAPs to respond to assessed risks.

USE OF SUBSTANTIVE ANALYTICAL PROCEDURES IN AN AUDIT TO OBTAIN AUDIT EVIDENCE

Under PCAOB standards, auditors are permitted, but not required, to perform SAPs as part of a financial statement audit. Existing standards describe that the auditor's reliance on substantive tests to achieve an audit objective related to a particular assertion may be derived from tests of details, from SAPs, or from a combination of both.[8] For some assertions, SAPs may provide persuasive audit evidence to address the auditor's assessed risk. For other assertions, it may be necessary for the auditor to obtain audit evidence from tests of details that is more persuasive than audit evidence from SAPs.

A basic premise underlying the application of SAPs is that plausible relationships among data may reasonably be expected to exist and continue in the absence of known conditions to the contrary. Particular conditions that can cause variations in these relationships include, for example, specific unusual transactions or events, accounting changes, business changes, random fluctuations, or misstatements. Generally, more persuasive evidence is obtained from a SAP when a relationship is more predictable. Relationships involving income statement accounts tend to be more predictable than relationships involving only balance sheet accounts since income statement accounts represent transactions over a period of time, whereas balance sheet accounts represent amounts as of a point in time.[9]

QUESTIONS:

- In your experience, what types of accounts and relevant assertions are SAPs used for as part of the auditor's response to assessed risks of material misstatement? Are they used alone or in combination with tests of details?
- In your experience, do preparers use analytical procedures that include developing an expectation, and if so, for which types of accounts and for what purpose?

SUBSTANTIVE ANALYTICAL PROCEDURES AS PART OF THE AUDIT RESPONSE TO ASSESSED SIGNIFICANT RISKS OF MATERIAL MISSTATEMENT, INCLUDING FRAUD RISKS

As part of identifying and assessing risks of material misstatement, the auditor is required to determine whether any of the identified and assessed risks of material misstatement are significant risks.[10] Significant risks under PCAOB standards are risks that require special audit consideration because of the nature of the risk and the likelihood and potential magnitude of misstatement related to the risk.[11] Under PCAOB standards significant risks include fraud risks.[12] For significant risks of material

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reorganization did not impose additional requirements on auditors or change substantively the requirements of PCAOB standards.

[8] *See* AS 2305.09.
[9] *See* AS 2305.02 and .14.
[10] *See* AS 2110.59f.
[11] *See* AS 2110.70.
[12] *See* AS 2110.71b, which describes that a fraud risk is a significant risk.

misstatement, it is unlikely that audit evidence from SAPs alone will be sufficient,[13] and auditors are required to perform tests of details that are specifically responsive to the assessed risk.[14]

QUESTIONS:

- In your experience, what are examples of SAPs used as part of the audit response to significant risks, including fraud risks?

- In your experience, could SAPs ever be as effective, or even more effective than tests of details, in responding to a significant risk, including a fraud risk? When would it be the case?

SOURCES OF INFORMATION USED IN DEVELOPING THE AUDITOR'S EXPECTATION; PRECISION OF THE AUDITOR'S EXPECTATION

SAPs involve comparisons of recorded amounts, or ratios developed from recorded amounts, to expectations developed by the auditor. The auditor develops such expectations by identifying and using plausible relationships that are reasonably expected to exist based on the auditor's understanding of the company and of the industry in which the company operates.[15]

The auditor's expectation may be developed from information from external sources (e.g., information regarding the company's industry) or from company-produced information (e.g., financial information from comparable prior periods). Reliable information may not be available for the auditor to develop expectations for some assertions of some accounts.[16] The reliability of information used to develop the auditor's expectation affects the appropriateness of the evidence obtained from the SAP.[17]

The auditor's expectation should be precise enough such that differences that may indicate potential misstatements, individually or when aggregated with other misstatements, would be identified for the auditor to investigate. Expectations developed at a detailed level generally have a greater chance of detecting misstatement of a given amount than do broad comparisons.[18] For example, an expectation of sales developed by line of business would generally be more precise than an expectation of sales developed across the company.

QUESTIONS:

- In your experience, for which audit areas (e.g., accounts, relevant assertions) could auditors develop more precise expectations than others?

- In your experience, would developing expectations using ratios in SAPs provide evidence that is as persuasive as using amounts? In what circumstances would this be the case?

- In your experience, when and for what types of accounts have expectations been able to be developed using information from external sources? When would it be more effective to

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[13] *See* AS 2305.09

[14] *See* AS 2301.11 and .13, specifying the auditor's responsibilities for responses to significant risks and fraud risks.

[15] *See* AS 2305.05.

[16] *See* AS 2305.15.

[17] *See* AS 2305.16 and AS 1105.

[18] *See* AS 2305.17-.20.

develop expectations using information from an external source, and when would it be less effective?

CHANGES AS THE RESULT OF ADVANCEMENTS IN TECHNOLOGY

In the more than 30 years since AS 2305 was written, there have been advancements in both the use of technology-based tools by auditors to access and analyze data and the availability of information. Some auditors are using technology-based tools to perform SAPs in connection with auditing certain assertions. In some instances, the use of technology-based tools can enable auditors to disaggregate data to a level where the most plausible and predictable relationships are more readily identified, which in turn can improve the precision of an audit procedure (e.g., improving the precision of an expectation developed as part of a SAP).[19]

Advancements in technology in recent years have also improved accessibility and expanded the volume of information available to companies and their auditors from traditional and newer external sources. Traditional external sources of information, such as regulatory agencies and industry data providers, are increasingly making certain information more accessible. For example, external sources have developed interactive applications that can provide real-time industry data to companies (e.g., occupancy rates and trend reports used in the hospitality industry). In addition, information from relatively newer, nontraditional external sources, such as web data aggregators and social media platforms, is becoming more prevalent.[20] Such information is sometimes used by auditors as audit evidence, including when designing and performing SAPs.

QUESTIONS:

- In your experience, has the auditor's use of technology changed how and when SAPs are designed and performed? If so, how? What further changes could be expected?

- Would the use of technology result in auditors being able to develop more precise expectations in additional audit areas (e.g., additional accounts or assessed risks)? Which types of technologies would enable the auditor to develop more precise expectations and in which areas?

- What are the advantages and disadvantages of the increased availability of information and use of technology-based tools in designing and performing SAPs?

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[19] *See e.g.,* page 6 of *Spotlight: Data and Technology Research Project Update May 2021, available at* https://pcaobus.org/resources/staff-publications.

[20] *See* page 3 of *Staff Guidance – Insights for Auditors Evaluating Relevance and Reliability of Audit Evidence Obtained from External Sources (October 2021), available at* https://pcaobus.org/oversight/standards/staff-guidance.

Appendix AS 2305, Substantive Analytical Procedures, and relevant excerpts from other PCAOB standards

AS 2305: *Substantive Analytical Procedures*

.01 This section establishes requirements regarding the use of substantive analytical procedures in an audit.

> Note: AS 2110, *Identifying and Assessing Risks of Material Misstatement*, establishes requirements regarding performing analytical procedures as a risk assessment procedure in identifying and assessing risks of material misstatement.
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> Note: AS 2810, *Evaluating Audit Results*, establishes requirements regarding performing analytical procedures as part of the overall review stage of the audit.

.02 Analytical procedures are an important part of the audit process and consist of evaluations of financial information made by a study of plausible relationships among both financial and nonfinancial data. Analytical procedures range from simple comparisons to the use of complex models involving many relationships and elements of data. A basic premise underlying the application of analytical procedures is that plausible relationships among data may reasonably be expected to exist and continue in the absence of known conditions to the contrary. Particular conditions that can cause variations in these relationships include, for example, specific unusual transactions or events, accounting changes, business changes, random fluctuations, or misstatements.

.03 Understanding financial relationships is essential in planning and evaluating the results of analytical procedures, and generally requires knowledge of the client and the industry or industries in which the client operates. An understanding of the purposes of analytical procedures and the limitations of those procedures is also important.

.04 Analytical procedures are used as a substantive test to obtain evidential matter about particular assertions related to account balances or classes of transactions. In some cases, analytical procedures can be more effective or efficient than tests of details for achieving particular substantive testing objectives.

.05 Analytical procedures involve comparisons of recorded amounts, or ratios developed from recorded amounts, to expectations developed by the auditor. The auditor develops such expectations by identifying and using plausible relationships that are reasonably expected to exist based on the auditor's understanding of the client and of the industry in which the client operates. Following are examples of sources of information for developing expectations:

- *a.* Financial information for comparable prior period(s) giving consideration to known changes
- *b.* Anticipated results—for example, budgets, or forecasts including extrapolations from interim or annual data
- *c.* Relationships among elements of financial information within the period

d. Information regarding the industry in which the client operates—for example, gross margin information

e. Relationships of financial information with relevant nonfinancial information

[.06-.08] [Paragraphs deleted.]

Analytical Procedures Used as Substantive Tests

.09 The auditor's reliance on substantive tests to achieve an audit objective related to a particular assertion[1] may be derived from tests of details, from analytical procedures, or from a combination of both. The decision about which procedure or procedures to use to achieve a particular audit objective is based on the auditor's judgment on the expected effectiveness and efficiency of the available procedures. For significant risks of material misstatement, it is unlikely that audit evidence obtained from substantive analytical procedures alone will be sufficient. (*See* paragraph .11 of AS 2301, *The Auditor's Responses to the Risks of Material Misstatement*.)

[1] Assertions are representations by management that are embodied in financial statement components. *See* AS 1105, *Audit Evidence*.

.10 The auditor considers the level of assurance, if any, he wants from substantive testing for a particular audit objective and decides, among other things, which procedure, or combination of procedures, can provide that level of assurance. For some assertions, analytical procedures are effective in providing the appropriate level of assurance. For other assertions, however, analytical procedures may not be as effective or efficient as tests of details in providing the desired level of assurance. When designing substantive analytical procedures, the auditor also should evaluate the risk of management override of controls. As part of this process, the auditor should evaluate whether such an override might have allowed adjustments outside of the normal period-end financial reporting process to have been made to the financial statements. Such adjustments might have resulted in artificial changes to the financial statement relationships being analyzed, causing the auditor to draw erroneous conclusions. For this reason, substantive analytical procedures alone are not well suited to detecting fraud.

.11 The expected effectiveness and efficiency of an analytical procedure in identifying potential misstatements depends on, among other things, (*a*) the nature of the assertion, (*b*) the plausibility and predictability of the relationship, (*c*) the availability and reliability of the data used to develop the expectation, and (*d*) the precision of the expectation.

Nature of Assertion

.12 Analytical procedures may be effective and efficient tests for assertions in which potential misstatements would not be apparent from an examination of the detailed evidence or in which detailed evidence is not readily available. For example, comparisons of aggregate salaries paid with the number of personnel may indicate unauthorized payments that may not be apparent from testing individual transactions. Differences from expected relationships may also indicate potential omissions when independent evidence that an individual transaction should have been recorded may not be readily available.

Plausibility and Predictability of the Relationship

.13 It is important for the auditor to understand the reasons that make relationships plausible because data sometimes appear to be related when they are not, which could lead the auditor to erroneous conclusions. In addition, the presence of an unexpected relationship can provide important evidence when appropriately scrutinized.

.14 As higher levels of assurance are desired from analytical procedures, more predictable relationships are required to develop the expectation. Relationships in a stable environment are usually more predictable than relationships in a dynamic or unstable environment. Relationships involving income statement accounts tend to be more predictable than relationships involving only balance sheet accounts since income statement accounts represent transactions over a period of time, whereas balance sheet accounts represent amounts as of a point in time. Relationships involving transactions subject to management discretion are sometimes less predictable. For example, management may elect to incur maintenance expense rather than replace plant and equipment, or they may delay advertising expenditures.

Availability and Reliability of Data

.15 Data may or may not be readily available to develop expectations for some assertions. For example, to test the completeness assertion, expected sales for some entities might be developed from production statistics or square feet of selling space. For other entities, data relevant to the assertion of completeness of sales may not be readily available, and it may be more effective or efficient to use the details of shipping records to test that assertion.

.16 Before using the results obtained from substantive analytical procedures, the auditor should either test the design and operating effectiveness of controls over financial information used in the substantive analytical procedures or perform other procedures to support the completeness and accuracy of the underlying information. The auditor obtains assurance from analytical procedures based upon the consistency of the recorded amounts with expectations developed from data derived from other sources. The reliability of the data used to develop the expectations should be appropriate for the desired level of assurance from the analytical procedure. The auditor should assess the reliability of the data by considering the source of the data and the conditions under which it was gathered, as well as other knowledge the auditor may have about the data. The following factors influence the auditor's consideration of the reliability of data for purposes of achieving audit objectives:

- Whether the data was obtained from independent sources outside the entity or from sources within the entity
- Whether sources within the entity were independent of those who are responsible for the amount being audited
- Whether the data was developed under a reliable system with adequate controls
- Whether the data was subjected to audit testing in the current or prior year
- Whether the expectations were developed using data from a variety of sources

Precision of the Expectation

.17 The expectation should be precise enough to provide the desired level of assurance that differences that may be potential material misstatements, individually or when aggregated with other misstatements, would be identified for the auditor to investigate (*see* paragraph .20). As expectations become more precise, the range of expected differences becomes narrower and, accordingly, the likelihood increases that significant differences from the expectations are due to misstatements. The precision of the expectation depends on, among other things, the auditor's identification and consideration of factors that significantly affect the amount being audited and the level of detail of data used to develop the expectation.

.18 Many factors can influence financial relationships. For example, sales are affected by prices, volume and product mix. Each of these, in turn, may be affected by a number of factors, and offsetting factors can obscure misstatements. More effective identification of factors that significantly affect the relationship is generally needed as the desired level of assurance from analytical procedures increases.

.19 Expectations developed at a detailed level generally have a greater chance of detecting misstatement of a given amount than do broad comparisons. Monthly amounts will generally be more effective than annual amounts and comparisons by location or line of business usually will be more effective than company-wide comparisons. The level of detail that is appropriate will be influenced by the nature of the client, its size and its complexity. Generally, the risk that material misstatement could be obscured by offsetting factors increases as a client's operations become more complex and more diversified. Disaggregation helps reduce this risk.

Investigation and Evaluation of Significant Differences

.20 In planning the analytical procedures as a substantive test, the auditor should consider the amount of difference from the expectation that can be accepted without further investigation. This consideration is influenced primarily by materiality and should be consistent with the level of assurance desired from the procedures. Determination of this amount involves considering the possibility that a combination of misstatements in the specific account balances, or class of transactions, or other balances or classes could aggregate to an unacceptable amount.

.21 The auditor should evaluate significant unexpected differences. Reconsidering the methods and factors used in developing the expectation and inquiry of management may assist the auditor in this regard. Management responses, however, should ordinarily be corroborated with other evidential matter. In those cases when an explanation for the difference cannot be obtained, the auditor should obtain sufficient evidence about the assertion by performing other audit procedures to satisfy himself as to whether the difference is a misstatement. In designing such other procedures, the auditor should consider that unexplained differences may indicate an increased risk of material misstatement. (*See* AS 2810.)

Documentation of Substantive Analytical Procedures

.22 When an analytical procedure is used as the principal substantive test of a significant financial statement assertion, the auditor should document all of the following:

a. The expectation, where that expectation is not otherwise readily determinable from the documentation of the work performed, and factors considered in its development

b. Results of the comparison of the expectation to the recorded amounts or ratios developed from recorded amounts

c. Any additional auditing procedures performed in response to significant unexpected differences arising from the analytical procedure and the results of such additional procedures

[.23-.24] [Paragraphs deleted.]

AS 2110: *Identifying and Assessing Risks of Material Misstatement*

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Performing Analytical Procedures

.46 The auditor should perform analytical procedures that are designed to:

a. Enhance the auditor's understanding of the client's business and the significant transactions and events that have occurred since the prior year end; and

b. Identify areas that might represent specific risks relevant to the audit, including the existence of unusual transactions and events, and amounts, ratios, and trends that warrant investigation.

.47 In applying analytical procedures as risk assessment procedures, the auditor should perform analytical procedures relating to revenue with the objective of identifying unusual or unexpected relationships involving revenue accounts that might indicate a material misstatement, including material misstatement due to fraud. Also, when the auditor has performed a review of interim financial information in accordance with AS 4105, he or she should take into account the analytical procedures applied in that review when designing and applying analytical procedures as risk assessment procedures.

.48 When performing an analytical procedure, the auditor should use his or her understanding of the company to develop expectations about plausible relationships among the data to be used in the procedure. [27] When comparison of those expectations with relationships derived from recorded amounts yields unusual or unexpected results, the auditor should take into account those results in identifying the risks of material misstatement.

> Note: Analytical procedures performed as risk assessment procedures often use data that is preliminary or data that is aggregated at a high level, and, in those instances, such analytical procedures are not designed with the level of precision necessary for substantive analytical procedures.

[27] Analytical procedures consist of evaluations of financial information made by a study of plausible relationships among both financial and nonfinancial data.

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Factors Relevant to Identifying Significant Risks

.70 To determine whether an identified and assessed risk is a significant risk, the auditor should evaluate whether the risk requires special audit consideration because of the nature of the risk or the likelihood and potential magnitude of misstatement related to the risk.

> Note: The determination of whether a risk of material misstatement is a significant risk is based on inherent risk, without regard to the effect of controls.

.71 Factors that should be evaluated in determining which risks are significant risks include:

a. The effect of the quantitative and qualitative risk factors discussed in paragraph .60 on the likelihood and potential magnitude of misstatements;

b. Whether the risk is a fraud risk;

> Note: A fraud risk is a significant risk.

c. Whether the risk is related to recent significant economic, accounting, or other developments;

d. The complexity of transactions;

e. Whether the risk involves significant transactions with related parties;

f. The degree of complexity or judgment in the recognition or measurement of financial information related to the risk, especially those measurements involving a wide range of measurement uncertainty; and

g. Whether the risk involves significant unusual transactions.

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AS 2301: *The Auditor's Responses to the Risks of Material Misstatement*

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Responses Involving the Nature, Timing, and Extent of Audit Procedures

.08 The auditor should design and perform audit procedures in a manner that addresses the assessed risks of material misstatement for each relevant assertion of each significant account and disclosure.

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Responses to Significant Risks

.11 For significant risks, the auditor should perform substantive procedures, including tests of details, that are specifically responsive to the assessed risks.

> Note: AS 2110 discusses identification of significant risks[10] and states that fraud risks are significant risks.

[10] *See* AS 2110.71 for factors that the auditor should evaluate in determining which risks are significant risks.

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Responses to Fraud Risks

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.13 *Addressing Fraud Risks in the Audit of Financial Statements.* In the audit of financial statements, the auditor should perform substantive procedures, including tests of details, that are specifically responsive to the assessed fraud risks. If the auditor selects certain controls intended to address the assessed fraud risks for testing in accordance with paragraphs .16-.17 of this standard, the auditor should perform tests of those controls.

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Substantive Procedures

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.36 The auditor should perform substantive procedures for each relevant assertion of each significant account and disclosure, regardless of the assessed level of control risk.

> Note: Performing substantive procedures for the relevant assertions of significant accounts and disclosures involves testing whether the significant accounts and disclosures are in conformity with the applicable financial reporting framework.

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AS 2810: *Evaluating Audit Results*

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Performing Analytical Procedures in the Overall Review

.05 In the overall review, the auditor should read the financial statements and disclosures and perform analytical procedures to (a) evaluate the auditor's conclusions formed regarding significant

accounts and disclosures and (b) assist in forming an opinion on whether the financial statements as a whole are free of material misstatement.

.06 As part of the overall review, the auditor should evaluate whether:

a. The evidence gathered in response to unusual or unexpected transactions, events, amounts, or relationships previously identified during the audit is sufficient; and

b. Unusual or unexpected transactions, events, amounts, or relationships[3] indicate risks of material misstatement that were not identified previously, including, in particular, fraud risks.

> Note: If the auditor discovers a previously unidentified risk of material misstatement or concludes that the evidence gathered is not adequate, he or she should modify his or her audit procedures or perform additional procedures as necessary in accordance with paragraph .36 of this standard.

[3] Paragraphs .46-.48 of AS 2110, *Identifying and Assessing Risks of Material Misstatement,* and paragraph .03 of AS 2305, *Substantive Analytical Procedures.*

.07 The nature and extent of the analytical procedures performed during the overall review may be similar to the analytical procedures performed as risk assessment procedures. The auditor should perform analytical procedures relating to revenue through the end of the reporting period.[4]

[4] AS 2110.47 contains a requirement to perform analytical procedures relating to revenue as part of the risk assessment procedures.

.08 The auditor should obtain corroboration for management's explanations regarding significant unusual or unexpected transactions, events, amounts, or relationships. If management's responses to the auditor's inquiries appear to be implausible, inconsistent with other audit evidence, imprecise, or not at a sufficient level of detail to be useful, the auditor should perform procedures to address the matter.

.09 *Evaluating Whether Analytical Procedures Indicate a Previously Unrecognized Fraud Risk.* Whether an unusual or unexpected transaction, event, amount, or relationship indicates a fraud risk, as discussed in paragraph .06b, depends on the relevant facts and circumstances, including the nature of the account or relationship among the data used in the analytical procedures. For example, certain unusual or unexpected transactions, events, amounts, or relationships could indicate a fraud risk if a component of the relationship involves accounts and disclosures that management has incentives or pressures to manipulate, *e.g.*, significant unusual or unexpected relationships involving revenue and income.

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