

# SA 520 (AAS 14)

## ANALYTICAL PROCEDURES

*(Effective for all audits relating to  
accounting periods beginning on or after April 1, 1997)*

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### Contents

|                                                                              | Paragraph(s) |
|------------------------------------------------------------------------------|--------------|
| Introduction.....                                                            | 1-3          |
| Nature and Purpose of Analytical Procedures .....                            | 4-7          |
| Analytical Procedures in Planning the Audit .....                            | 8-9          |
| Analytical Procedures as Substantive Procedures .....                        | 10-12        |
| Analytical Procedures in the Overall Review<br>at the End of the Audit ..... | 13           |
| Extent of Reliance on Analytical Procedures.....                             | 14-16        |
| Investigating Unusual Items.....                                             | 17-18        |
| Effective Date.....                                                          | 19           |

Standard on Auditing (SA) 520\*, “Analytical Procedures” should be read in the context of the “Preface to the Standards on Quality Control, Auditing, Review, Other Assurance and Related Services”<sup>1</sup>, which sets out the authority of SAs.

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\* Issued in December, 1997.

<sup>1</sup> Published in the July 2007 issue of the Journal.

## **Introduction**

1. The purpose of this Standard on Auditing (SA) is to establish standards on the application of analytical procedures during an audit.
2. The auditor should apply analytical procedures at the planning and overall review stages of the audit. Analytical procedures may also be applied at other stages.
3. "Analytical procedures" means the analysis of significant ratios and trends, including the resulting investigation of fluctuations and relationships that are inconsistent with other relevant information or which deviate from predicted amounts.

## **Nature and Purpose of Analytical Procedures**

4. Analytical procedures include the consideration of comparisons of the entity's financial information with, for example:
  - ◆ Comparable information for prior periods.
  - ◆ Anticipated results of the entity, such as budgets or forecasts.
  - ◆ Predictive estimates prepared by the auditor, such as an estimation of depreciation charge for the year.
  - ◆ Similar industry information, such as a comparison of the entity's ratio of sales to trade debtors with industry averages, or with other entities of comparable size in the same industry.
5. Analytical procedures also include consideration of relationships:
  - ◆ Among elements of financial information that would be expected to conform to a predictable pattern based on the entity's experience, such as gross margin percentages.
  - ◆ Between financial information and relevant non-financial information, such as payroll costs to number of employees.
6. Various methods may be used in performing the above procedures. These range from simple comparisons to complex analyses using advanced statistical techniques. Analytical procedures may be applied to consolidated financial statements, financial statements of components (such as subsidiaries, divisions or segments) and individual elements of financial information. The auditor's choice of procedures, methods and level of

## ***Analytical Procedures***

application is a matter of professional judgement.

7. Analytical procedures are used for the following purposes:

- (a) to assist the auditor in planning the nature, timing and extent of other audit procedures;
- (b) as substantive procedures when their use can be more effective or efficient than tests of details in reducing detection risk for specific financial statement assertions; and
- (c) as an overall review of the financial statements in the final review stage of the audit.

### **Analytical Procedures in Planning the Audit**

8. The auditor should apply analytical procedures at the planning stage to assist in understanding the business and in identifying areas of potential risk. Application of analytical procedures may indicate aspects of the business of which the auditor was unaware and will assist in determining the nature, timing and extent of other audit procedures.

9. Analytical procedures in planning the audit use both financial and non-financial information, for example, the relationship between sales and square footage of selling space or volume of goods sold.

### **Analytical Procedures as Substantive Procedures**

10. The auditor's reliance on substantive procedures to reduce detection risk relating to specific financial statement assertions may be derived from tests of details, from analytical procedures, or from a combination of both. The decision about which procedures to use to achieve a particular audit objective is based on the auditor's judgement about the expected effectiveness and efficiency of the available procedures in reducing detection risk for specific financial statement assertions.

11. The auditor will ordinarily inquire of management as to the availability and reliability of information needed to apply analytical procedures and the results of any such procedures performed by the entity. It may be efficient to use analytical data prepared by the entity, provided the auditor is satisfied that such data is properly prepared.

12. When intending to perform analytical procedures as substantive

### ***Handbook of Auditing Pronouncements-I***

procedures, the auditor will need to consider a number of factors such as the:

- ◆ Objectives of the analytical procedures and the extent to which their results can be relied upon (paragraphs 14-16).
- ◆ Nature of the entity and the degree to which information can be disaggregated, for example, analytical procedures may be more effective when applied to financial information on individual sections of an operation or to financial statements of components of a diversified entity, than when applied to the financial statements of the entity as a whole.
- ◆ Availability of information, both financial, such as budgets or forecasts, and non-financial, such as the number of units produced or sold.
- ◆ Reliability of the information available, for example, whether budgets are prepared with sufficient care.
- ◆ Relevance of the information available, for example, whether budgets have been established as results to be expected rather than as goals to be achieved.
- ◆ Source of the information available, for example, sources independent of the entity are ordinarily more reliable than internal sources.
- ◆ Comparability of the information available, for example, broad industry data may need to be supplemented to be comparable to that of an entity that produces and sells specialised products.
- ◆ Knowledge gained during previous audits, together with the auditor's understanding of the effectiveness of the accounting and internal control systems and the types of problems that in prior periods have given rise to accounting adjustments.

### **Analytical Procedures in the Overall Review at the End of the Audit**

13. The auditor should apply analytical procedures at or near the end of the audit when forming an overall conclusion as to whether the financial statements as a whole are consistent with the auditor's knowledge of the business. The conclusions drawn from the results of such procedures are intended to corroborate conclusions formed during the audit of individual components or elements of the financial statements and assist

## ***Analytical Procedures***

in arriving at the overall conclusion as to the reasonableness of the financial statements. However, in some cases, as a result of application of analytical procedures, the auditor may identify areas where further procedures need to be applied before the auditor can form an overall conclusion about the financial statements.

### **Extent of Reliance on Analytical Procedures**

14. The application of analytical procedures is based on the expectation that relationships among data exist and continue in the absence of known conditions to the contrary. The presence of these relationships provides audit evidence as to the completeness, accuracy and validity of the data produced by the accounting system. However, reliance on the results of analytical procedures will depend on the auditor's assessment of the risk that the analytical procedures may identify relationships as expected when, in fact, a material misstatement exists.

15. The extent of reliance that the auditor places on the results of analytical procedures depends on the following factors:

- (a) materiality of the items involved, for example, when inventory balances are material, the auditor does not rely only on analytical procedures in forming conclusions. However, the auditor may rely solely on analytical procedures for certain income and expense items when they are not individually material;
- (b) other audit procedures directed toward the same audit objectives, for example, other procedures performed by the auditor in reviewing the collectibility of accounts receivable, such as the review of subsequent cash receipts, might confirm or dispel questions raised from the application of analytical procedures to an ageing schedule of customers' accounts;
- (c) accuracy with which the expected results of analytical procedures can be predicted. For example, the auditor will ordinarily expect greater consistency in comparing gross profit margins from one period to another than in comparing discretionary expenses, such as research or advertising; and
- (d) assessments of inherent and control risks, for example, if internal control over sales order processing is weak and, therefore, control risk

## ***Handbook of Auditing Pronouncements-I***

is high, more reliance on tests of details of transactions and balances than on analytical procedures in drawing conclusions on receivables may be required.

16. The auditor will need to consider testing the controls, if any, over the preparation of information used in applying analytical procedures. When such controls are effective, the auditor will have greater confidence in the reliability of the information and, therefore, in the results of analytical procedures. The controls over non-financial information can often be tested in conjunction with tests of accounting-related controls. For example, an entity in establishing controls over the processing of sales invoices may include controls over the recording of unit sales. In these circumstances, the auditor could test the controls over the recording of unit sales in conjunction with tests of the controls over the processing of sales invoices.

### **Investigating Unusual Items**

17. When analytical procedures identify significant fluctuations or relationships that are inconsistent with other relevant information or that deviate from predicted amounts, the auditor should investigate and obtain adequate explanations and appropriate corroborative evidence.

18. The investigation of unusual fluctuations and relationships ordinarily begins with inquiries of management, followed by:

- (a) corroboration of management's responses, for example, by comparing them with the auditor's knowledge of the business and other evidence obtained during the course of the audit; and
- (b) consideration of the need to apply other audit procedures based on the results of such inquiries, if management is unable to provide an explanation or if the explanation is not considered adequate.

### **Effective Date**

19. This Standard on Auditing becomes operative for all audits relating to accounting periods beginning on or after April 1, 1997.