CHAPTER 8 : ANALYTICAL PROCEDURES

Meaning of Analytical Procedures

As per SA 520: It means evaluation of financial information through analysis of relationships among both financial and non-financial data. Analytical procedures also Iincludes investigation as is necessary of identified fl uctuations or relationships that are inconsistent with other relevant information or that diff er from expected values by a signifi cant amount.

Examples of Analytical Procedures considering comparisons of the entity's financial information with are:

—Comparable information for prior periods.

—Anticipated results of the entity, such as budgets or forecasts, or expectations of the auditor, such as an estimation of depreciation.

—Similar industry information, such as a comparison of the entity's ratio of sales to accounts receivable with industry averages or with other entities of comparable size in the same industry

Examples of Analytical procedures onsidering relationships are:

—Among elements of fi nancial information that would be expected to conform to a predictable pattern based on the entity's experience, such as gross margin percentages.

— Between fi nancial information and relevant non-fi nancial information, such as payroll costs to number of employees.

Timing of Analytical Procedures

Analytical Procedures are required in the planning phase and it is often done during the testing phase. In addition these are also required during the completion phase.

Factors to be considered for Substantive Analytical Procedures

Availability of Data – The availability of reliable and relevant data will facilitate eff ective procedures.

Disaggregation – The degree of disaggregation in available data can directly aff ect the degree of its usefulness in detecting misstatements

Account Type – Substantive analytical procedures are more useful for certain types of accounts than for others. Income statement accounts tend to be more predictable because they refl ect accumulated transactions over a period, whereas balance sheet accounts represent the net eff ect of transactions at a point in time or are subject to greater management judgment.

Source – Some classes of transactions tend to be more predictable because they consist of numerous, similar transactions, (e.g., through routine processes). Whereas the transactions recorded by non-routine and estimation SCOTs are often subject to management judgment and therefore more diffi cult to predict.

Predictability – Substantive analytical procedures are more appropriate when an account balance or relationships between items of data are predictable (e.g., between sales and cost of sales or between trade receivables and cash receipts). A predictable relationship is one that may reasonably be expected to exist and continue over time.

Nature of Assertion – Substantive analytical procedures may be more eff ective in providing evidence for some assertions (e.g., completeness or valuation) than for others (e.g., rights and obligations). Predictive analytical procedures using data analytics can be used to address completeness, valuation/measurement and occurrence.

Inherent Risk or "What Can Go Wrong" – When we are designing audit procedures to address an inherent risk or "what can go wrong", we consider the nature of the risk of material misstatement in order to determine if a substantive analytical procedure can be used to obtain audit evidence. When inherent risk is higher, we may design tests of details to address the higher inherent risk. When signifi cant risks have been identifi ed, audit evidence obtained solely from substantive analytical procedures is unlikely to be suffi cient.

Techniques Available as Substantive Analytical Procedures

Trend analysis – A commonly used technique is the comparison of current data with the prior period balance or with a trend in two or more prior period balances. We evaluate whether the current balance of an account moves in line with the trend established with previous balances for that account, or based on an understanding of factors that may cause the account to change.

Ratio analysis – Ratio analysis is useful for analysing asset and liability accounts as well as revenue and expense accounts. An individual balance sheet account is diffi cult to predict on its own, but its relationship to another account is often more predictable (e.g., the trade receivables balance related to sales). Ratios can also be compared over time or to the ratios of separate entities within the group, or with the ratios of other companies in the same industry.

Reasonableness tests – Unlike trend analysis, this analytical procedure does not rely on events of prior periods, but upon non-fi nancial data for the audit period under consideration (e.g., occupancy rates to estimate rental income or interest rates to estimate interest income or expense). These tests are generally more applicable to income statement accounts and certain accrual or prepayment accounts.

Structural modelling – A modelling tool constructs a statistical model from fi nancial and/or non-financial data of prior accounting periods to predict current account balances (e.g., linear regression).

Analytical Procedures used as Substantive Tests

When designing and performing substantive analytical procedures, either alone or in combination with tests of details, as substantive procedures in accordance with SA 330, the auditor shall:

(i) Determine the suitability of particular substantive analytical procedures for given assertions, taking account of the assessed risks of material misstatement and tests of details, if any, for these assertions;

(ii) Evaluate the reliability of data from which the auditor's expectation of recorded amounts or ratios is developed, taking account of source, comparability, and nature and relevance of information available, and controls over preparation;

(iii) Develop an expectation of recorded amounts or ratios and evaluate whether the expectation is suffi ciently precise to identify a misstatement that, individually or when aggregated with other misstatements, may cause the FS to be materially misstated; and

iv) Determine the amount of any diff erence of recorded amounts from expected values that is acceptable without further investigation.

Suitability Of Particular Analytical Procedures

Substantive analytical procedures are generally more applicable to large volumes of transactions that tend to be predictable over time.

It is based on the expectation that relationships among data exist and continue in the absence of known conditions to the contrary. However, the suitability of a particular analytical procedure will depend upon the auditor's assessment of how eff ective it will be in detecting a misstatement that, individually or when aggregated with other misstatements, may cause the FS to be materially misstated.

In some cases, even an unsophisticated predictive model may be eff ective as an analytical procedure.

Diff erent types of analytical procedures provide diff erent levels of assurance.

Example, the prediction of total rental income on a building divided into apartments, taking the rental rates, the number of apartments and vacancy rates into consideration, can provide persuasive evidence and may eliminate the need for further verifi cation by means of tests of details, provided the elements are appropriately verifi ed. In contrast, calculation and comparison of gross margin percentages as a means of confi rming a revenue fi gure may provide less persuasive evidence, but may provide useful corroboration if used in combination with other audit procedures.

Suitability is infl uenced by the nature of the assertion and the auditor's assessment of the risk of material misstatement.

For example, if controls over sales order processing are weak, the auditor may place more reliance on tests of details rather than on substantive analytical procedures for assertions related to receivables.

Particular substantive analytical procedures may also be considered suitable when tests of details are performed on the same assertion. For example, when obtaining audit evidence regarding the valuation assertion for accounts receivable balances, the auditor may apply analytical procedures to an aging of customers' accounts in addition to performing tests of details on subsequent cash receipts to determine the collectability of the receivables.

Extent Of Reliance On Analytical Procedures

(i) ***Source*** of the information available. For example, information may be more reliable when it is obtained from independent sources outside the entity;

(ii) ***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;

(iii) ***Nature and relevance*** of the information available. For example, whether budgets have been established as results to be expected rather than as goals to be achieved; and

(iv) ***Controls*** over the preparation of the information that are designed to ensure its completeness, accuracy and validity. For example, controls over the preparation, review and maintenance of budgets.

Investigating Results Of Analytical Procedures

(i) Inquiring of management and obtaining appropriate audit evidence relevant to management's responses

(ii) Performing other audit procedures as necessary