

APPENDIX E

Analytical Methods

Analytical methods are a very efficient and effective way to obtain audit assurance. They should be performed on every audit.

Computer-assisted auditing techniques (CAATs) are a useful tool for performing analytical methods. With the use of a CAAT, the auditor can perform numerous analyses instantaneously. If performed manually, the equivalent work could consume extensive audit effort.

Analytical methods are techniques used by the auditor to:

- Study the relationships among elements of financial and non-financial information to form expectations as to what the recorded amounts should be; and
- Compare such expectations with the recorded amounts.

Analytical methods are substantive tests. They primarily involve a comparison of the recorded amount being audited to an amount that the auditor expects. The auditor's expectation of the amount is derived from his/her knowledge of relationships between the amount being audited and other data. The data used in arriving at the auditor's expectation of the amount may be financial or non-financial and may originate from within or outside the entity being audited.

Analytical methods vary from simple comparisons, such as comparing the current year's amounts with the prior year's amounts, to complex analysis using ratios, advanced statistical techniques and computer audit software, such as multiple regression analysis software.

Analytical methods are often thought of as simply comparing amounts in one year to amounts in previous years. However, analytical methods can be used to perform many more comparisons. They can include, for example:

- An analysis of ratios among various accounts. For example, the auditor could calculate the ratio of the total remuneration to the average number of employees, and compare that ratio to previous years.
- An analysis of the composition of accounts. For example, the auditor could compare the ageing of the accounts receivable or the mix of stocks to previous years.
- Determining concentrations. For example, the auditor could determine the proportion of purchases from a single supplier, or the proportion of sales to a single market or a single customer.

Analytical methods involve performing a comparison or other test on aggregate data – the total expenditures for each month, the total amount of sales tax revenue for the year, etc. If the aggregate amount appears reasonable, the auditor concludes that the individual transactions and balances making up the aggregate amount are reasonable. As such, analytical methods follow a "top down" substantive approach where the reliability of individual recorded transactions and balances is inferred from evidence of the reasonableness of the aggregate results.

In contrast, a substantive test of details is a "bottom up" substantive approach where the reasonableness of the aggregate results is inferred from the evidence provided by examining individual recorded transactions. The auditor selects a representative sample of transactions and uses that sample to reach a conclusion about the population as a whole.

Like other substantive tests, analytical methods can rarely be used exclusively as the sole source of audit assurance, except when dealing with immaterial balances. When combined with other audit evidence however, analytical methods may provide a significant portion of the assurance as to the reliability of the financial statements.

Analytical methods may be used in all stages of the audit to achieve various objectives. These include:

Planning phase:

- To obtain knowledge of the entity's business operations;
- To identify areas for particular audit attention, such as large projects, large transactions, potential irregularities;
- To identify high inherent risk and high control risk areas in order to better focus the audit work; and
- To obtain some degree of audit assurance.

Conducting phase:

- To obtain some degree of audit assurance;
- To explore for anomalies or transactions that require detailed examination.

Evaluation phase:

- To assess the internal consistency and overall reasonableness of the financial statements using the auditor's knowledge of the entity;
- To obtain some degree of audit assurance.

Analytical methods require a great deal of professional judgment and, therefore, it is important that experienced audit personnel participate in the application and monitor the decisions made by their audit staff.

Basic factors to consider before deciding to use analytical methods as a source of audit assurance

Deciding whether to use analytical methods as a source of audit assurance is a matter of professional judgment. Some of the factors the auditor should consider before using an analytical procedure are discussed in the following paragraphs.

Audit team attributes. To properly plan, perform and evaluate the results of an analytical procedure, one must have a sound understanding of the entity, the industry and the data being analysed. Should the audit team not possess a sufficient understanding to perform a particular analytical procedure, then the procedure should not be performed.

The inherent risk and the control risk. The higher these risks, the greater the possibility that the data to be used in the analytical procedure is unreliable. In particular, should management officials be able to override specific internal controls and manipulate the data, they may be able to alter the data so as to hide significant fluctuations, over-expended appropriations, etc.

The component and the specific financial audit objective(s) for which audit evidence is required. Analytical methods are generally more useful in providing assurance for revenue and expenditure accounts than for balance sheet accounts. For example, analytical methods may be very useful in providing assurance as to the completeness and measurement of many revenue and expenditure accounts. However, they are usually not very good at testing the validity or ownership of assets.

Related compliance with authority objective for which audit evidence is required. Analytical methods are often not particularly good at obtaining assurance with respect to most compliance with authority objectives. For example analytical methods will not be very good at determining whether:

- The services were actually performed or the goods were actually received;
- The expenditures are consistent with the nature of the appropriation to which they were charged;
- The expenditures, borrowings or cash received are in accordance with the applicable legislation; or
- The cash received was for an approved tax or other approved revenue source.

For all of the above, a detailed examination of specific expenditure transactions, borrowing transactions, or revenue transactions is normally the best way to obtain assurance with respect to these compliance with authority objectives.

Similarly, analytical methods are often not good at determining if there are appropriations that have been exceeded but have not been so disclosed. This is because entity officials may simply adjust the books or defer the recording of expenditures to hide such situations. A detailed examination of journal vouchers and the coding on specific transactions, and a detailed review of the year-end cut-off, are normally the best way to obtain assurance with respect to this particular compliance with authority objective.

Costs and benefits of obtaining assurance from analytical methods. Generally, analytical methods take less time to apply than a test of details and, therefore, have the potential to be a more efficient source of audit evidence. Cost and benefit considerations include:

- The ease and cost of obtaining and assessing the reliability of the data to be used in the analytical procedure;
- The ease and cost of applying the analytical procedure, including obtaining appropriate explanations for all significant fluctuations; and
- The ease and cost of obtaining assurance from other sources of audit assurance.

Categories of analytical methods

In this appendix analytical methods are grouped into several general categories.

As a general rule, each category can provide a greater amount of assurance than the previous category. However, there are numerous factors, other than the type of analytical procedure

being performed, that affects the amount of assurance that can be obtained from a particular procedure. These other factors are discussed below.

Scanning for Anomalies

Scanning is a useful technique for searching out significant events or transactions that may require further review. Significant items may be items of unusual size or unexpectedly high or low frequency, of a questionable nature, or inconsistent with other known information. For example, more than one payment for a particular item, on the same day, or for exactly the same amount can indicate duplicate payments, fraud or other procurement problems. Scanning is most easily accomplished with the use of CAATs.

Sometimes the data need to be manipulated to be in a form that anomalies can be more easily detected. For example, calculation of a unit price, or cost per unit measurement, can identify unusual situations that would not show up easily without the calculation. If methods of payment are uneven through the year, aggregation for the year can identify differences more easily.

Transactions, or sets of transactions, can be compared to a standard or an acceptable range of values. Examination of payroll, for example, could include a search for any salary payments in excess of the salary ranges for the respective employees' positions. This can identify unusual payments, or can direct attention to excessive overtime payments.

General reviews for reasonableness

This category of analytical methods involves a high level comparison of current information with that of previous periods, with budgets or with statistics available from the entity. No pre-determined threshold amount is specified for identifying significant fluctuations. The process is sometimes referred to as "eyeballing" the financial statements – the auditor looks for accounts that appear to be unusual in amount, in volume of activity, etc.

The objective of this type of analysis is generally attention directing as opposed to obtaining audit assurance.

Although this type of analytical procedure normally does not provide any assurance, it can contribute immensely to an understanding of how the entity operates, how different components should interrelate, and how the financial statements should present the underlying events.

As a result, general reviews for reasonableness should be conducted during the general planning phase and the evaluation phase of the audit.

Comparative analysis

This category of analytical methods involves comparing the current year's reported amounts (or ratios) with those of the prior year (or years). The data from the previous year(s) are *not* adjusted for known changes in the factors affecting the data. Comparative analysis assumes that the prior year's data provide a sufficiently accurate estimate of the current year's amount and, therefore, can be used to identify any significant fluctuations from the current year's recorded amount. A pre-determined threshold amount is specified for identifying significant fluctuations.

For example, the auditor may decide to compare the employee related expenses (pay, allowances, etc.), operating expenses (fees, communications, utilities, etc.) and income tax receipts to the equivalent amounts for the previous year. The auditor would then follow up differences greater than the threshold amount.

This type of analytical procedure can provide a low level of substantive assurance.

Exploratory analysis

The auditor can obtain useful information by exploring databases and identifying large size transactions, duplicate transactions, or other anomalies.

Predictive analysis

Predictive analysis involves comparing the current year's reported amounts (or ratios) with a prediction of what the current year's amounts (or ratios) should be based upon the trend of the amounts (or ratios) from the previous year (or years). The data from the previous year(s) *are* adjusted for all known changes in the factors affecting the data. A pre-determined threshold amount is specified for identifying significant fluctuations.

For example, before making a comparison of the employee related expenses for the current year to the equivalent expenses for the previous year, the auditor could adjust the previous year's amounts for known changes in the average pay scales and in the number of staff within the specific entity for which the comparison is being made.

Similarly, before making a comparison of income tax receipts for the current year to the equivalent amounts for the previous year, the auditor could adjust the previous year's amounts for known changes in income tax rates.

Because the prior year's amounts are adjusted for known changes before the comparison is made, this type of analytical procedure can produce a more precise estimate than would be the case with comparative analysis. As a result, it can provide a higher level of substantive assurance than comparative analysis.

Statistical analysis

This category of analytical methods involves analysing the known behaviour of variables and developing an equation (model) that explains the relationship between these variables. A pre-determined threshold amount is specified for identifying significant fluctuations.

For example, the auditor could input data on employee related expenses for the previous several years into the software package. The software package would then estimate the amount of employee related expenses for the current year.

Although this category is similar to predictive analysis, statistical analysis provides more accurate predictions and objectively measures the confidence level and the achieved level of precision of the prediction. As a result, it can provide an even higher level of substantive assurance than predictive analysis.

Overall verification methods

This category of analytical methods involves building up an estimate of an account balance from known and verified (as opposed to analysed) data. For example, the auditor could verify the number of rental units by type of unit, the average rent by type of unit, and the vacancy rate by type of unit. For each type of unit the auditor could then multiply the number of units times the average rent times the vacancy rate and compare the result to the revenue received from the rents.

As another example, the auditor could verify the monthly salary for each employee on the payroll and use that data to estimate the total payroll expenditure for salaried employees.

A pre-determined threshold amount is specified for identifying significant fluctuations.

Overall verification methods usually result in a very accurate estimate of the account. For this reason, and because the inputs are verified (as opposed to analysed), this category of analytical methods generally produces a very high level of substantive assurance.

Factors affecting the assurance that can be derived from different methods

The degree of assurance derivable from a particular type of analytical procedure depends on many factors that must be considered by the auditor. Outlined below are the key factors affecting the effectiveness of an analytical procedure.

Category to which the procedure belongs

The quality of an analytical procedure depends on the category to which it belongs. As we move from general reviews for reasonableness through to overall verification methods, a more comprehensive analysis of the underlying relationships is usually performed. This, in turn, results in a greater amount of substantive assurance.

While guidelines should not replace the use of professional judgment, the following may be useful for determining the amount of assurance that is usually achievable from each category of analytical methods:

Type of Analytical Procedure	Assurance	Resulting Risk
Scanning/reviews for reasonableness	0%	100%
Comparative/exploratory analysis	Up to 30%	70% or more
Predictive analysis	Up to 50%	50% or more
Statistical analysis	Up to 70%	30% or more
Overall verification methods	Up to 90%	10% or more

The reason for the “up to” and “or more” is because there are numerous other factors that affect the amount of assurance that can be obtained from a particular procedure. These other factors are discussed in the rest of this section.

Threshold amount used to determine significant fluctuations

If the auditor sets a low threshold amount he/she will have more fluctuations to follow up than if the auditor selected a high threshold amount. As a result, the lower the threshold amount, the higher the assurance that can be achieved.

In setting the amount to be used for identifying significant fluctuations, the auditor should consider the planned precision determined for the audit. The threshold amount to be used for identifying significant fluctuations should be directly related to this planned precision amount.

With a statistical analysis software package, the planned precision and the desired level of assurance are keyed in and the software package automatically calculates the amount to be used. For other types of analytical methods, the auditor must set the threshold amount subjectively using his/her professional judgment.

Items comprising an account balance can be analysed using a number of different data profiles. For example, when analysing payroll expenditures for the federal government, the auditor could analyse the expenditures:

- For the government as a whole;
- By ministry, department, and/or agency, etc;
- By division or by staff classification;

- By major object, minor object or detailed object; and/or
- For the year as a whole or for each month.

Given the different groupings, it is not possible to specify a blanket threshold amount that would be applicable to all analytical methods. However, guidelines can be used for general categories. While these guidelines should not replace the use of professional judgment, the following may be useful for determining the maximum threshold amount that should be used to determine a significant fluctuation. All are percentages of planned precision.

Level of Data Aggregation	Annual Data	Monthly Data
Entity-wide data (e.g., payroll related expenses for the entity as a whole)	50%	20%
Disaggregated by one level (e.g., payroll expenditures for each ministry, department or agency, <i>or</i> by minor object as opposed to major object)	15%	5%
Disaggregated by two levels (e.g., payroll expenditures for each division or staff classification within each ministry, department or agency)	5%	2%

Quality of the relationship

The quality of an analytical procedure is only as good as the quality of the underlying relationship upon which it is built. In seeking to identify the quality of a relationship, the factors described in the following paragraphs should be considered.

Simplicity of the relationship. The fewer the factors that could cause changes in an account over time, the easier it should be to estimate the current year's balance and follow up significant fluctuations. As more factors are added, it becomes increasingly difficult to design an analytical procedure that will adequately capture each factor's impact on the account.

Plausibility of the relationship. A plausible relationship is one that the auditor may reasonably expect to exist based on an understanding of the business and the accounting methods. For example, an increase in pay rates would be a plausible explanation for an increase in payroll expenditures. On the other hand, an increase in the number of suppliers being used may not have any impact at all of the total amount for capital expenditures.

Relevance of the relationship. A relevant relationship is one that addresses the specific financial audit objective(s) and/or related compliance with authority objective(s) in a meaningful way. For example, identifying a relationship that would obtain assurance as to the ownership of assets is usually not possible.

Consistency of the relationship. A consistent relationship is one that is stable over time. This characteristic addresses how well the past predicts the future.

Quality of the data

There are four major factors that affect the quality of the data used in the analysis, as follows:

1. Extent to which the auditor can expect the data to be complete and accurate;
2. Independence of the data;
3. Level of data aggregation; and

4. Measurement frequency and number of periods of data used.

Each is discussed below.

Extent to which the auditor can expect the data to be complete and accurate. Analytical methods should be performed using data that the auditor can reasonably expect to be complete and accurate.

The ways in which the auditor obtains assurance as to the completeness and accuracy of the data depend on whether the data used for the analytical methods is produced by the entity itself (internally produced data), or obtained from external sources.

In order to obtain evidence as to the completeness and accuracy of data produced by the entity itself, the auditor usually needs to test the system that produced the data. The extent of reliance on analytical methods using internally produced data is, therefore, directly related to the auditor's reliance on the internal control structure.

The cost-effectiveness of performing the necessary supporting tests of controls on internally produced data will normally affect the cost-effectiveness of performing the analytical methods themselves. As a result, the auditor should assess the cost-effectiveness of obtaining assurance from testing the internal controls at the same time as assessing the cost-effectiveness of obtaining assurance from the analytical methods.

For data obtained outside the entity, the nature of the source should be assessed to determine whether the data can be considered pertinent, complete and accurate.

Independence of the data. For data to be independent, each item being used in the analysis should come from a source that is different than the source of the amount being analysed. This ensures a stronger test, as it is unlikely that errors will occur in both sets of data simultaneously.

If the items are not coming from an independent source, the auditor would need to verify the completeness and accuracy of the items being used in the analysis.

The most independent internal sources are records maintained by different people. Examples would include shipping records, production records, personnel records and similar records that are not part of the basic accounting records.

If external data are available and used in the analysis, it would ordinarily satisfy the independence criteria. However, care must still be exercised in determining whether the data are relevant. For example, industry statistics are often several years out of date.

Level of data aggregation. In general, the less aggregated the data, the better the analysis that will result, and the greater the amount of assurance that can be obtained. This is because the less aggregated the data, the less chance there is that errors in one specific account will be hidden by fluctuations in other accounts.

For example, the auditor may decide to simply compare revenues by major object (direct taxes and indirect taxes) to the equivalent amounts for the previous year. A better test would be to do the comparison at the minor object level – taxes on income, wealth tax, property tax, etc. And, even better, the auditor could decide to do the comparison at the detailed object level – various categories for taxes from companies, taxes from registered firms, taxes from individuals, etc.

Measurement frequency and number of periods of data used. Generally, the greater the number of data observations used in the analysis, the stronger the evidence provided through the analytical procedure. The more frequently one can observe a particular relationship, the more one can be assured of the consistency of the relationship.

For example:

- Monthly observations generally provide more useful information (and assurance) than annual observations; and
- Using several years' data in the analysis generally provides more assurance than only using the most recent year's data.

Summary

While the category of analytical methods can have a significant impact on the amount of assurance that can be derived from the procedure, there are numerous other factors that need to be considered.

The Standard Audit Working Paper Kit contains an Analytical Methods Assessment Form. This form summarises all of the factors discussed above and can be used to assess the amount of assurance that the auditor can derive from a particular analytical procedure.

The following points should be noted when using the form:

After considering all the factors outlined above (and summarised on the form), the auditor uses his/her professional judgment to determine the possible degree of assurance.

In some cases, one or more of the factors may significantly influence the amount of assurance that may be taken. For example, if the relationship is not considered plausible, then no assurance is warranted from the analytical procedure, and it should not be performed.

For each of the five types of analytical methods, a possible range of assurance is specified. The lower limit of each assurance range is set at nil, indicating that it is possible that the lack of one or more factors may render the analytical procedure unreliable.

The process for performing analytical methods

To help ensure effective analytical methods, each analytical procedure application should follow three stages, consisting of 13 steps, described below.

To assist staff in applying this process, an Analytical Methods Design Checklist is included in the Standard Audit Working Paper Kit.

Stage 1 – designing the procedure

This work is normally started during the general audit planning phase, with the details worked out in the detailed activity and resource planning stage.

Steps 1 to 6 often need to be performed at essentially the same time.

Step 1 – Define the accounting amount to be analysed. This step primarily involves determining:

The component (asset, liability, revenue or expenditure, etc.) to be audited;

The level of data aggregation (analysing the component for the entity as a whole, by ministry, department or agency, by division, etc.); and

The measurement frequency (monthly, quarterly, annually, etc.).

Frequency will be a trade-off between the cost of gathering the data and performing the analysis, and the desired level of assurance.

Step 2 – Consider the objectives for the analytical methods. This step will primarily involve a consideration of the specific financial audit objectives, related compliance with authority objectives and error conditions for which the procedure is to provide assurance.

Step 3 – Determine the analytical procedure to be used. The auditor must decide on the appropriate analytical procedure to use given the specific financial audit objectives, related compliance with authority objectives and errors conditions. This decision will depend on the degree of assurance desired.

Step 4 – Define a significant difference. This is one of the most important steps in the process. It affects the subsequent amount of audit work that has to be performed to obtain assurance from the analytical procedure. It may therefore have a significant impact on the amount of the required audit work.

As discussed above, the threshold point above which a fluctuation is considered significant should usually be set as a percentage of planned precision.

It is particularly important that this step be performed before actually identifying significant fluctuations to help ensure a rational and consistent identification of fluctuations to be investigated.

Step 5 – Specify the degree of assurance to be obtained from applying the analytical procedure. This step requires the auditor to use his/her professional judgment in weighting the many factors outlined above, and summarised in the Analytical Methods Assurance Form in the Standard Audit Working Paper Kit.

Step 6 – Decide between computer or non-computer analysis of the data. This step requires the auditor to consider the use of CAATs to identify, accumulate and/or analyse the data being used.

Step 7 – Obtain audit management review and approval. Given the impact of analytical methods as a major potential source of audit assurance, it is important that the planned use of analytical methods be well documented and approved by the Deputy Auditor General (Senior) or responsible Deputy Auditor General prior to its actual application.

This step should be done automatically as part of the approval of the audit programmes developed during the detailed planning phase.

Stage 2 – performing the procedure

These steps are completed during the fieldwork phase.

The Standard Audit Working Paper Kit includes “Analytical Methods Forms” that can be used to assist in performing these steps.

Step 8 – Ensure audit control is maintained. This step requires the auditor to document how he/she maintained control over the data being used for the analytical procedure.

This step is particularly important when entity personnel have provided the data. The auditor should conduct various tests to determine the number of records, file totals, etc., and compare these with reports produced by the operating system.

Also, the auditor should ensure that the files examined are for the period under examination. A test should be performed to see if any transactions included in the data took place outside the period under examination.

Step 9 – Make the comparisons. This is a mechanical procedure. The auditor performs the analysis planned in the previous steps. Care must be exercised to ensure that the person performing the comparison understands all of the previous steps.

Step 10 – Identify significant fluctuations. Using the pre-determined threshold point (see step 4), the auditor identifies all fluctuations in excess of the threshold amount.

Sometimes the data need to be manipulated before the auditor can easily detect the significant fluctuations. CAATs can be used to re-order the data in a way that it makes it easier for the auditor to identify the fluctuations.

Step 11 – Investigate significant fluctuations. The significant fluctuations identified by the previous step may be caused by:

Circumstances that the auditor knew about beforehand but had intentionally not taken into account when designing the analytical procedure. For example, the auditor could have used comparative analysis instead of predictive analysis, the relationship may have been too complex to take into account, or the auditor may have lacked adequate information.

Circumstances unknown to the auditor when designing the analytical procedure. It is these unknown fluctuations that usually are of particular concern.

The auditor should begin his/her investigation of the cause of the significant fluctuation(s) by discussing them with entity officials. However, explanations received from the officials should not be accepted at face value. Each “explanation” received should be supported by corroborative evidence provided through other audit methods.

For example, entity officials may explain an increase in utility costs by stating that there has been a significant increase in utility rates. The auditor could then check the accuracy of this assertion.

Explanations of some fluctuations given by management may not be substantiated by the auditor through enquiry and/or analysis. In these circumstances, relevant tests of details may be required to substantiate the cause of the fluctuation. In all cases, the working papers should provide evidence that the auditor has adequately investigated all significant fluctuations.

For example, management may justify an increase in tax revenue from companies by stating that the average net income of all companies in Pakistan has increased. This assertion may not be verifiable, or may only be verifiable at great cost. The auditor may decide to reduce his/her planned reliance on analytical methods and replace it with more substantive tests of details of tax receipts from corporations.

A key question is the extent to which the auditor should be required to explain the significant fluctuation. To illustrate, let’s assume that the auditor decided that all fluctuations greater than

Rs. 350,000 would be significant, and the auditor has an unexplained difference of Rs. 350,100 – just Rs. 100 over the threshold amount.

It is not reasonable to expect the auditor to obtain an explanation for the entire Rs. 350,100. At the same time, if the auditor was simply required to obtain enough of an explanation to reduce the unexplained difference to just under Rs. 350,000, the auditor would only need to explain Rs 100 out of the Rs. 350,100.

While professional judgment is again necessary, a useful guideline is that the auditor should obtain an adequate explanation to reduce the unexplained fluctuation to one half of the threshold amount that has been used to determine a significant fluctuation. In our case, this would be Rs. 175,000. Therefore, the auditor would need to explain Rs. 175,100 of the difference.

Stage 3 – evaluating the results of the procedure

This step is performed at the evaluation phase.

Step 12 – Form the conclusion. At this stage of the analytical procedure process, one of the four following situations will generally exist:

There are no significant fluctuations, and there is no conflicting audit evidence that indicates that there should be a significant fluctuation;

All the significant fluctuations will have been investigated and adequate explanations obtained, substantiated and documented;

Explanations have been provided, but cannot be cost-effectively substantiated; and

Entity officials (and the auditor) cannot adequately explain some of the significant fluctuations.

There are no significant fluctuations, and there is no conflicting audit evidence that indicates that there should be a significant fluctuation. It is possible that the auditor's other methods will indicate that there should be a significant fluctuation in his/her analytical methods. For example, the auditor could find material errors in a substantive test of details sample. Such errors would normally also result in significant fluctuations when the auditor compares the current year's balance to the previous year's balance, etc.

Assuming that there is no conflicting audit evidence, even though the auditor will not have performed any work in Step 11, he/she will have obtained the amount of assurance desired from the analytical procedure.

All the significant fluctuations will have been investigated and adequate explanations obtained, substantiated and documented. As in the first case, the auditor will have obtained the amount of assurance desired from the analytical procedure.

Explanations have been provided, but cannot be cost-effectively substantiated. In this case, while entity officials may have provided explanations for all significant fluctuations, the auditor cannot obtain the audit evidence required to substantiate the explanations, or can only substantiate the explanations at great cost. In cases such as these, the auditor is *normally* required to take no assurance from the analytical procedure, and *normally* needs to perform additional appropriate tests of details. Assuming that these tests do not provide audit evidence that conflicts with the explanations provided, the auditor will have obtained sufficient assurance. Where the tests indicate that the explanations provided may not be correct, the auditor should take the steps noted below.

Entity officials (and the auditor) cannot adequately explain some of the significant fluctuations. This situation should be rare since all practical efforts should be made to obtain satisfactory explanations for all significant fluctuations. In the rare instances where satisfactory explanations cannot be obtained, additional appropriate tests of details should *normally* be performed. (As above, the reason for the “normally” is because the auditor may have other options).

In these cases, however, it is *not* sufficient to simply drop the analytical procedure and extend the detailed testing to make up for the assurance that was not obtained via the analytical procedure. To do this would be to ignore audit evidence that indicates a potential problem. Instead, the auditor should reassess inherent risk as high, take no assurance from the analytical procedure, and reconsider the extent of his/her planned reliance on the internal control structure. This will result in extensive substantive tests of details being performed. These methods will either identify material errors or indicate that material error does not exist and that sufficient assurance has been obtained.

The results from applying the analytical procedure should be considered along with, and in conjunction with, the results of the auditor’s other methods in determining the amount that should be carried forward to the Summary of Unadjusted Differences.

Step 13 – Obtain audit management review and approval. This last step in the analytical procedure process requires a more senior level person to review the documentation and approve the assurance taken.