

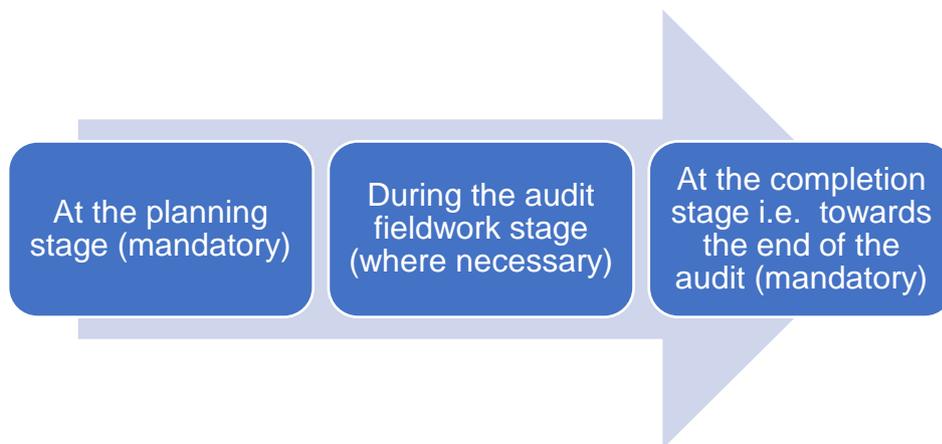
## 1 Analytical review (Lecture A818 – 9.28 minutes)

Analytical review is dealt with in ISA (UK) 520 *Analytical Procedures*. For the purposes of ISA (UK) 520, the term ‘analytical procedures’ means:

*... evaluations of financial information through analysis of plausible relationships among both financial and non-financial data. Analytical procedures also encompass such investigation as is necessary of identified fluctuations or relationships that are inconsistent with other relevant information or that differ from expected values by a significant amount.*

ISA (UK) 520,  
para 4

There are three areas of the audit where analytical procedures are applied:



### 1.1 At the planning stage

At the planning stage, the auditor must apply analytical procedures as risk assessment procedures in order to:

- (a) help them assess the risk of material misstatement so as to provide a basis for designing and implementing responses to assessed risks;
- (b) help identify the existence of unusual transactions, amounts, ratios and trends which may indicate a risk of material misstatement (e.g. a significant increase or decrease in a gross profit margin that could indicate problems such as cut-off errors/incorrect revenue recognition practices); and
- (c) help the auditor to identify risks of material misstatement due to fraud.

Typically, analytical procedures include a mix of ratio analysis, comparison of current year figures against prior year, calculation of anticipated results (e.g. by way of proof in total) or comparison of the entity’s results against any available industry averages.

The majority of the work involving analytical procedures at planning will involve the calculation of various ratios and percentages. However, analytical procedures also include the consideration of relationships within the financial statements, for example:

- Gross profit margins involve a relationship between the entity’s revenue and cost of sales and, in most entities, are expected to remain relatively static from one reporting period to the next.

Hence, disproportionate increases/decreases within the gross profit margin are indicative of a risk of material misstatement (although do keep in mind that this is not the case in every industry – some industries do operate on volatile gross margins).

- Financial information and non-financial information, such as payroll costs in relation to the number of employees.

Modern audit software contains sophisticated methods of producing analytical review, including the calculation of ratios to assist the auditor in identifying where risks of material misstatement may lie.

Whenever analytical procedures are used, it is important to consider the expectations for the relationship being analysed. For instance, if there has been a change in the operating model of a business, or a new branch has opened or others have closed, last year's revenue or gross profit margins may not be a good comparison. Instead, the auditor should consider what change may be expected, if any, and whether this is borne out by the analysis.

Key ratios the auditor may use include the following:

Ratio	Calculation
<b><u>Profitability ratios</u></b>	
In most cases, the auditor would expect profitability ratios to stay relatively stable, although issues which can affect these ratios include, among other things, payroll increases, changes in sales prices and bulk discounts received.	<ul style="list-style-type: none"> <li>• Gross profit margin (GP / sales x 100)</li> <li>• Net profit margin (pre-tax profit/sales x 100)</li> <li>• Operating profit margin (operating profit/sales x 100)</li> </ul>
<b><u>Efficiency ratios</u></b>	
These ratios show how long, on average, a client takes to collect cash from customers, pay suppliers and hold inventory. Ideally, debtor and stock days should be as short as possible (without affecting the relationship with the supplier) to maximise cash flows.	<ul style="list-style-type: none"> <li>• Trade debtor days (trade debtors/sales x 365)</li> <li>• Trade creditor days (trade creditors/purchases x 365)</li> <li>• Stock holding days (stock/cost of sales x 365)</li> </ul>
<b><u>Liquidity ratios</u></b>	
These ratios indicate how capable a company is in meeting its short-term obligations. These ratios are used by the auditor in assessing going concern.	<ul style="list-style-type: none"> <li>• Current ratio (current assets/current liabilities)</li> <li>• Quick ratio (current assets less stock/current liabilities)</li> <li>• Gearing ratio (borrowing/share capital + reserves)</li> </ul>
<b><u>Investor ratios</u></b>	
These are a measure of external debt finance to internal equity finance. The return on capital employed measures the returns investments have generated. These are important in identifying material changes to the balance sheet and for assessing the overall performance of the entity.	<ul style="list-style-type: none"> <li>• Return on capital employed (profit before interest and tax/share capital + reserves + borrowing)</li> </ul>

## 1.2 During the audit fieldwork stage

During the audit fieldwork stage (the evidence-gathering stage), analytical procedures may be used as substantive procedures when the auditor considers that the use of analytical procedures can be more effective or efficient than tests of details in reducing the risk of material misstatement at the assertion level to an acceptably low level.

### Important point

Where reliance is placed on substantive analytical procedures in order to reduce sample sizes, the substantive analytical procedures must be robust and compliant with the requirements of ISA (UK) 520.

File reviews often identify inappropriate reliance placed on substantive analytical procedures which are of poor quality or provide little or no evidence because they do not follow the requirements of ISA (UK) 520.

During the audit fieldwork stage, the auditor may use substantive analytical procedures to obtain relevant and reliable audit evidence. However, the relationships being examined must be capable of a high enough degree of predictability and hence accuracy to be useful. For instance, analytical review of fees for a private school based on pupil numbers could be expected to be accurate; whereas analytical review of revenue of a wholesaler of sports equipment is unlikely to have a predictable enough relationship to act as a substantive test. ISA (UK) 520, para 5 sets out specific steps required where substantive analytical procedures are to be used as follows:

- (a) 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.
- (b) 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.
- (c) Develop an expectation of recorded amounts or ratios and evaluate whether the expectation is sufficiently precise to identify a misstatement that, individually, or when aggregated with other misstatements, may cause the financial statements to be materially misstated.
- (d) Determine the amount of any difference of recorded amounts from expected values that is acceptable without further investigation.

## 1.3 Final analytical review

Analytical procedures are performed as an overall review of the financial statements at the end of the audit process to assess whether the financial statements are consistent with the auditor's understanding of the entity. Final analytical procedures are not conducted to obtain additional substantive assurance. If irregularities are found, risk assessment should be performed again to consider any additional audit procedures which may be necessary.

The auditor will usually consider the following factors when carrying out final analytical procedures:

- whether the financial statements adequately reflect the information and explanations previously obtained from the client and the conclusions reached thereon;
- whether the analytical procedures reveal any new factors which may affect the presentation of the financial statements or disclosures therein;
- whether the analytical procedures produce results which assist the auditor in arriving at the overall conclusion as to whether the financial statements, as a whole, are consistent with the auditor's knowledge of the entity;
- whether the financial statements have been unduly influenced by management bias, such as to achieve a desired outcome; and
- the potential impact on the financial statements of the uncorrected misstatements identified during the course of the audit (including those arising as a result of bias in arriving at estimates).