

## Tests of Controls

(Relevant to AAT Examination Paper 8 — Principles of Auditing and Management Information Systems)

David Chow, FCCA, FCPA, CPA (Practising)

### Audit Approach for Designing Audit Procedures

In planning an audit, the auditor considers the appropriate audit approach for designing and performing further audit procedures based on the auditor's assessment of the identified risks at the assertion level. These audit procedures are referred to as (i) tests of controls and (ii) substantive procedures.

A **test of controls** is an audit procedure designed to evaluate the operating effectiveness of controls in preventing, or detecting and correcting, material misstatements at the assertion level. A **substantive procedure** is an audit procedure designed to detect material misstatements at the assertion level.

The auditor ordinarily performs both tests of controls and substantive procedures to express an opinion on the financial statements. The objective of performing tests of controls is to assess control risk. The results obtained from a test of controls may cause the auditor to alter the nature, timing, and extent of the substantive procedures to be performed and to plan and perform further tests of controls, especially when the auditor has identified control deficiencies.

The auditor shall design and perform tests of controls to test the internal controls set up by an entity so as to obtain sufficient appropriate audit evidence on the operating effectiveness of relevant controls if:

- (a) the auditor intends to rely on the operating effectiveness of controls; or
- (b) substantive procedures alone cannot provide sufficient appropriate audit evidence at the assertion level.

However, if the auditor has not identified any effective controls relevant to the assertion, or if testing controls would be inefficient, which occurs quite often in small entities, then the auditor will not intend to rely on the operating effectiveness of controls in determining the nature, timing and extent of substantive procedures. In such cases, it may be more efficient for the auditor to rely primarily on performing substantive procedures.

Regardless of the assessed level of control risk or the assessed risk of material misstatement in connection with the audit of the financial statements, the auditor should perform substantive procedures for all relevant assertions.

A higher level of assurance may be sought about the operating effectiveness of controls when the approach adopted consists primarily of tests of controls, in particular, where it is not possible or practicable to obtain sufficient appropriate audit evidence only from substantive procedures.

## **Nature of Tests of Controls**

The *nature* of an audit procedure refers to its purpose (i.e. is it a test of controls or confirmation, recalculation, reperformance, or analytical procedure). The nature of the audit procedures is of the greatest importance in responding to the assessed risks.

Inquiry alone is not sufficient to test the operating effectiveness of controls. Accordingly, other audit procedures are performed in combination with inquiry. In this regard, inquiry combined with inspection or reperformance may provide a higher degree of assurance than inquiry and observation, since an observation is pertinent only at the point in time at which it is made.

The nature of the particular control influences the type of test of controls required to obtain audit evidence about whether that control has been operating effectively. For example, if operating effectiveness is evidenced by documentation, the auditor may decide to inspect the document. However, documentation may not be available or relevant for other controls (such as the assignment of authority and responsibility), or for some types of control activities (such as control activities performed by a computer). In such circumstances, audit evidence about operating effectiveness may be obtained through inquiry in combination with other audit procedures (such as observation or the use of CAATs).

## **Extent of Tests of Controls**

The *extent* of an audit procedure refers to the quantity to be performed, for example, a sample size or the number of observations of a control activity.

When more persuasive audit evidence is needed regarding the effectiveness of a control, it may be appropriate to increase the extent of testing of the control. As well as the degree of reliance on controls, the auditor may consider the following matters in determining the extent of tests of controls:

- (a) The frequency of performance of the control by the entity during the period.
- (b) The length of time during the audit period that the auditor is relying on the operating effectiveness of the control.
- (c) The expected rate of deviation from a control.
- (d) The relevance and reliability of the audit evidence to be obtained regarding the operating effectiveness of the control at the assertion level.
- (e) The extent to which audit evidence is obtained from tests of other controls related to the assertion.

## **Timing of Tests of Controls**

The *timing* of an audit procedure refers to when it is performed, or the period or date to which the audit evidence applies.

To assess control risk for specific financial statement assertions, the auditor is required to obtain evidence that the relevant controls operated effectively during the entire period upon which the auditor plans to place reliance on those controls.

If the auditor obtains audit evidence about the operating effectiveness of controls during an interim period, the auditor shall ascertain whether there are any significant changes to those controls subsequent to the interim period and roll over the tests of controls over the remaining period.

If the auditor plans to use audit evidence from a previous audit about the operating effectiveness of specific controls, the auditor shall establish the continuing relevance of that evidence by performing inquiry, combined with observation or inspection, about whether significant changes in those controls have occurred subsequent to the previous audit. If there have been changes that affect the continuing relevance of the audit evidence from the previous audit, the auditor shall test the controls in the current audit. On the other hand, if no changes have occurred, the auditor shall spread the tests of controls over a three-year cycle. The auditor shall include in the audit documentation the conclusions reached about relying on such controls that were tested in a previous audit.

### **Designing and Performing Tests of Controls**

Tests of controls are performed only on those controls that the auditor has determined are suitably designed to prevent, or detect and correct, a material misstatement in an assertion. If substantially different controls were used at different times during the period under audit, then each is considered separately.

Testing the operating effectiveness of controls is different from obtaining an understanding of and evaluating the design and implementation of controls. However, the same types of audit procedures are used in each case. Therefore, it may be efficient for the auditor to test the operating effectiveness of controls at the same time as evaluating their design and determining that they have been implemented.

Furthermore, although some risk assessment procedures may not have been specifically designed as tests of controls, they may nevertheless provide audit evidence about the operating effectiveness of the controls and, consequently, serve as tests of controls.

### **Evaluating the Operating Effectiveness of Controls**

The concept of effectiveness of the operation of controls recognizes that some deviations may occur in the way controls are applied by the entity. Deviations from prescribed controls may be caused by such factors as changes in key personnel, significant seasonal fluctuations in the volume of transactions, and human error. The detected rate of deviation, in particular, in comparison with the expected rate, may indicate that the control cannot be relied on to reduce risk at the assertion level

assessed by the auditor. An unexpectedly high sample deviation rate may lead to an increase in the assessed risk of material misstatement, unless further audit evidence substantiating the initial assessment is obtained.

For tests of controls, no explicit projection of deviations is necessary since the sample deviation rate is also the projected deviation rate for the population as a whole. If the results of tests of controls have indicated deviations from controls upon which the auditor intends to rely, then the auditor shall make specific inquiries to understand these matters and their potential consequences, and shall determine whether:

- (a) the tests of controls that have been performed provide an appropriate basis for reliance on the controls;
- (b) additional tests of controls are necessary; or
- (c) the potential risks of misstatement need to be addressed using substantive procedures.

In analyzing the deviations identified, the auditor may decide to identify all items in the population that possess the common feature, for example, type of transaction, location, product line or period of time, and extend audit procedures to those items. Such deviations may be intentional, and may indicate the possibility of fraud.

If the auditor concludes that audit sampling has not provided a reasonable basis for conclusions about the population that has been tested, the auditor may:

- (a) request management to investigate misstatements that have been identified and the potential for further misstatements and to make any necessary adjustments; or
- (b) tailor the nature, timing and extent of those further audit procedures to best achieve the required assurance. For example, the auditor might extend the sample size, test an alternative control or modify related substantive procedures.

With respect to an automated control, it may not be necessary to increase the extent of testing due to the inherent consistency of IT processing. An automated control can be expected to function consistently unless the program is changed. Once the auditor determines that an automated control is functioning as intended, the auditor may consider performing tests on program change controls and to determine that the control continues to function effectively.

## **Sampling Risk**

Sampling risk is the risk that the auditor's conclusion based on a sample may be different from the conclusion if the entire population were subjected to the same audit procedure.

There are two types of erroneous conclusions arising from sampling risk relating to a test of controls:

- (a) Controls appear more effective than they actually are. The auditor is primarily concerned with this type of erroneous conclusion because it affects audit effectiveness.
- (b) Controls appear less effective than they actually are. This type of erroneous conclusion affects audit efficiency, as it would usually lead to additional work to establish that the initial conclusions were incorrect.

Reference:

HKSA 330 *The Auditor's Responses to Assessed Risks*, issued June 2009, revised June 2017, Hong Kong Institute of Certified Public Accountants

HKSA 530 (Clarified) *Audit Sampling*, issued July 2009, revised July 2010, Hong Kong Institute of Certified Public Accountants